$\Rightarrow$  d his

(FILE 'HOME' ENTERED AT 14:34:37 ON 16 DEC 2008)

FILE 'REGISTRY' ENTERED AT 14:34:59 ON 16 DEC 2008 STRUCTURE UPLOADED L1 L2 STRUCTURE UPLOADED L3 0 S L1 AND L2 0 S L1 AND L2 FULL L4 L5 7 S L1 L6 214 S L1 FULL 2 S L2 L7 L8 81 S L2 FULL L9 0 S L6 AND L8 FILE 'CAPLUS' ENTERED AT 14:42:19 ON 16 DEC 2008 L10 112 S L6

5 S L8 L11

0 S L10 AND L11 L12

=> fil reg FILE 'REGISTRY' ENTERED AT 14:46:10 ON 16 DEC 2008 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2008 American Chemical Society (ACS)

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STRUCTURE FILE UPDATES: 15 DEC 2008 HIGHEST RN 1084993-68-9 DICTIONARY FILE UPDATES: 15 DEC 2008 HIGHEST RN 1084993-68-9

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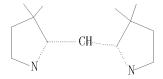
TSCA INFORMATION NOW CURRENT THROUGH July 5, 2008.

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REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=> d 11 L1 HAS NO ANSWERS L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> d 12L2 HAS NO ANSWERS STR

Structure attributes must be viewed using STN Express query preparation.

=> fil capl FILE 'CAPLUS' ENTERED AT 14:47:08 ON 16 DEC 2008 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

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FILE COVERS 1907 - 16 Dec 2008 VOL 149 ISS 25 FILE LAST UPDATED: 15 Dec 2008 (20081215/ED)

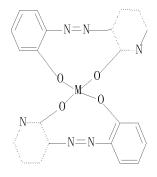
Caplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

http://www.cas.org/legal/infopolicy.html '.FIONA' IS DEFAULT FORMAT FOR 'CAPLUS' FILE

=> d que 112 stat L1 STR

Structure attributes must be viewed using STN Express query preparation. L2 STR



Structure attributes must be viewed using STN Express query preparation. L6  $\,$  214 SEA FILE=REGISTRY SSS FUL L1  $\,$ 

81 SEA FILE=REGISTRY SSS FUL L2 L8

112 SEA FILE=CAPLUS ABB=ON PLU=ON L6
5 SEA FILE=CAPLUS ABB=ON PLU=ON L8
0 SEA FILE=CAPLUS ABB=ON PLU=ON L10 AND L11 L10 L11

L12

=> d ll1 1-5 ide can 'IDE' IS NOT A VALID FORMAT FOR FILE 'CAPLUS' ENTER DISPLAY FORMAT (.FIONA):bib abs hitstr

ANSWER 1 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN 2003:792203 CAPLUS 141:32818 Synthesis and absorption properties of some new azo-metal chelates and their ligands

AU CS

141:325-15
Synthesis and absorption properties of some new azo-metal chelates and their ligands
Song, Haifeng; Chen, Kongchang; Wu, Dongqing; Tian, He
Institute of Fine Chemicais, East China University of Science and Iechnology, Shanghai, 200237, Peop. Rep. China
Dyes and Pigments (2003), Volume Date 2004, 60(2), 111-119
CODEN: DPIDN: ISSN: 0143-7208
Elsevier Science Ltd.
Journal
English
CASREACT 141:32818
Azo-metal chelates ML2 (W = Ni, Cr. Co: HL = A-N:N-B: A and/or B = substituted thiazolyl-, thiadiazolyl, phenoxyl-, hydroxypyridonyl-, naphtholyl- and barbiturate) were synthesized. Their structures were confirmed by IR spectra, MS spectra and UV-visible spectra. Their solubility in 4-hydroxy-4-methyl-2-pentanone and absorption properties of films were measured. The influence on the difference of absorption maximum from azo-metal chelates to their ligands by diazo components, coupling components and metal ions was studied.

700314-64-8P
NL: SNN (Synthetic preparation): PREP (Preparation)
(reparation and absorption properties of azo-metal chelates)
700314-64-8P
NL: SNN (Synthetic preparation): PREP (Preparation)
(reparation and absorption properties of azo-metal chelates)
700314-65-75 CAPLIS
Chromium bis[3-[15-cyano-1-ethyl-1, 6-dihydro-2-(hydroxy-KO)-4-methyl-6-oxo-7-pyridinyl]azo-KNl]-N, N-diethyl-4- (methoxy-KO)-4-methyl-6-oxo-7-pyridinyl]azo-KNl]-N, N-diethyl-4- (methoxy-KO)-4-methyl-6-oxo-7-pyridinyl-4-methyl-6-oxo-7-(Maxo-KO)-4-methyl-6-oxo-7-pyridinyl-4-methyl-6-oxo-7-(Maxo-KO)-4-methyl-6-oxo-7-(Maxo-KO)-4-methyl-6-oxo-7-(Maxo-KO)-4-methyl-6-oxo-7-(Maxo-KO)

IT

L11 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN

700814-43-3 CAPLUS Chromium, bis[1=ethyl-1,2-dihydro-6-(hydroxy-x0)-5-[[2-(methoxy-x0)-4-nitrophenyl]azo-xN1]-4-methyl-2-oxo-3- pyridinecarbonitrilato]-, (OC-6-22')- (OC) (CA INDEX NAME)

 $\label{eq:cobath} $700814-64-8$ $$CAPLUS$ $Cobath, bis[3-[15-cyano-1-ethyl-1,6-dihydro-2-(hydroxy-KO)-4-methyl-6-oxo-3--pyridinyl]azo-NN1]-N, N-diethyl-4-(methoxy-KO) benzenesulfonamidato]-, $$(OC-6-22')-(9CI)$ $$(CA INDEX NAME)$ $$$ 

L11 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN AN 1987:51692 CAPLUS COPYRIGHT 2008 ACS on STN DN 106:51692 OREF 106:8564h, 8565a

ORBE 106:8564h,8565a
II Sulfonic acid group-free basic azo compounds
IN Moser, Helmut A.; Wald, Roland
PA Sandoz-Patent-6.m.b.H., Fed. Rep. Ger.
ODDEN: GWXXBX
D Patent
LA German
FAN.CNT 1
PATENT NO. KIND DATE APPLIC APPLICATION NO. DATE PATENT NO.

PI DE 3609590
DE 3609590
DE 3609590
CH 667464
SE 8601401
SE 468392
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SE 468392
SE 279606
FR 2579606
GE 2173210
GB 2173210
GB 2173210
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JF 06062869
US 5852384
PRAI DE 1985-3511733
US 1986-848097
US 1991-709849
GI 19861002 A1 C2 C3 A5 A B C A1 B1 DE 1986-3609590 19860321 19881013 19900308 19881014 19861001 CH 1986-1164 SE 1986-1401 19860324 19860326 19930111 19930506 19930506 19861003 19890818 19890816 19890816 19861015 19940817 19941004 19850330 19860327 19870720 19910603 FR 1986-4666 19860327 GB 1986-7702 19860327 JP 1986-68859 19860328 US 1992-981740 19921125

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

IRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Title azo compds. I [n = 1, 2; M = ZINR7RS, ZIN+R7RSR9 A-; R = H, C1-4
alkyl, C5-6 cycloalkyl, Ph, PhCH2, PhCH2CH2; R1 = H, CN, CO2R4, CONRSGR,
SONNRSGR, R2 = H, balogen, OH, NO2, CO2H, C1-4 alkyl, C1-4 alkyl, R7, R8 =
C1-6 alkyl, phenyl(C1-5)alkyl; R5, R6 = H, C1-4 alkyl; R7, R8 =
cycloalkyl; R9 = (substituted) benylalkyl, (substituted) C5-6
cycloalkyl; R9 = (substituted) C1-4 alkyl, CH2Ac, CH2CONH2, CH2CHOHCH2C1;
A- a mion; Z = direct bond or bridging group; Z1 = branched or linear
C2-8 alkylene] are useful for dyeing or printing of paper, cellulose
materials, textiles, or leather. Thus, 4,4'-diaminodiphenylmethane with
tetrazotized and coupled with II to form III.

106314-36-7 CAPLUS
Chronium(3), bis[1][3-(dimethylamino)brooyl]-5'-[[4-[[[4-[[1'-[3-(
dimethylamino)brooyl]-1', 2'-dihydro-6'-bydroxy-4'-methyl-2'-oxo[1, 3'-bipyridinium]-5'-yl]ao-]-3-bydroxy-bynnyl]sulfonplamino]brevyl]aor]-1', 2'-dihydro-6'-bydroxy-4'-methyl-2'-oxo-1, 3'-bipyridiniumato(2-)]-, triacetate
(9C1) (CA INDEX NAME) AB IT

CM 1

CRN 106314-35-6 CMF C88 H98 Cr N22 014 S2 CCI CCS

L11 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN

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L11 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN

PAGE 2-B

 $\sim$  (CH2)3-NMe2

PAGE 3-A

CM 2 CRN 71-50-1 CMF C2 H3 02

L11 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN
AN 1986:70282 CAPLUS
N 104:70282
OREF 104:11245a, 11248a
TI Metal complex compounds
PA Hodogaya Chemical Co., Ltd., Japan
SO Jun. Kokai Tokkyo Koho, 6 pp.
CODEN: IKXXAF
T Patent
LA Japanese
FAN.CNT 1
PATENT NO. KIND DATE APPLICATIO APPLICATION NO DATE PI JP 60106859 JP 04050945 PRAI JP 1983-212603 GI 19850612 19920817 19831114 JP 1983-212603 19831114

The metal complex compds. I [R = H, Cl-10 alkyl, Cl-4 alkoxy, C2-5 alkoyaarbonyl, C2-5 acyl, aminocarbonyl, C2-5 alkylaminocarbonyl, C1-3 alkylami

L11 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN

(Continued) PAGE 1-A

● C1-

RN 100012-92-8 CAPLUS
CN Chromium(1+), bis[1',2'-dihydro-6'-hydroxy-5'-[(2-hydroxy-4,5-dimethylphenyl)a2-7-4'-methyl-2'-oxo-1,3'-bipyridiniumato(2-)]-, chloride
(9C1) (CA INDEX NAME)

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L11 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

PAGE 1-A

L11 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN (Continued

PAGE 3-A

RN 100012-93-9 CAPLUS
CN Chromium(1+), bis[4'-ethyl-5'-[[5-[(ethylamino)carbonyl]-2-hydroxyphenyl]azo]-1',2'-dihydro-6'-hydroxy-2'-oxo-1,3'-bipyridiniumato(2-)]-, chloride (9CI) (CA INDEX NAME)

L11 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

PAGE 3-A

• c1-

RN 100012-94-0 CAFLUS
CN Chromium(1+), bis[1', 2'-dihydro-6'-hydroxy-5'-[(2-hydroxy-5iodopheny1)azo]-4'-methy1-2'-oxo-1, 3'-bipyridiniumato(2-)]-, chloride
(9C1) (CA INDEX NAME)

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RN 100012-95-1 CAPLUS
CN Chromium(1+), bis[5'-[[5-(acetylamino)-2-hydroxypheny1]azo]-1',2'-dihydro-6'-hydroxy-4'-methy1-2'-oxo-1,3'-bipyridiniumato(2-)]-, chloride (9CI)
(CA INDEX NAME)

L11 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

PAGE 1-A

Page 7

NHAc NHAc

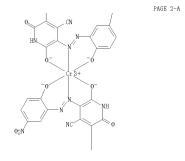
L11 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

RN 100012-96-2 CAPLUS
CN Chromium(1+), bis[4'-cyano-1',2'-dihydro-6'-hydroxy-5'-[(2-hydroxy-5-nitropheny1)azo]-2'-oxo-1,3'-bipyridiniumato(2-)]-, bromide (9CI) (CA INDEX NAME)

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No<sub>2</sub>

L11 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 100012-97-3 CAPLUS CN Chromium(1+), bis[5'-[(5-bromo-2-hydroxypheny1) azo]-1',2'-dihydro-6'-hydroxy-3,4'-dimethy1-2'-oxo-1,3'-bipyridiniumato(2-)]-, chloride (9CI) (CA INDEX MAME)

PAGE 1-A

Me N+

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L11 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

PAGE 3-A

• C1 -

N 100012-98-4 CAPLUS N Chromium(1+), bis[5'-[(5-cyano-2-hydroxypheny1)azo]-1',2'-dihydro-6'hydroxy-1',4'-dimethy1-2'-oxo-1,8'-bipyridiniumato(2-)]-, chloride (9CI) (CA NDEX NAME)

PAGE 1-A

L11 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

PAGE 2-A

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● C1

RN 100012-99-5 CAPLUS
CN Chromium(1+), bis[5] -[[5-(aminosulfonyl)-2-hydroxyphenyl]azo]-1',2'dihydro-6'-hydroxy-4'-methyl-1'-octadecyl-2'-oxo-1,3'-bipyridiniumato(2-)], chloride (9CI) (CA INDEX NAME)

L11 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

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RN 100013-00-1 CAPLUS
CN Chromium(1+), bis[1'-(2-chloropheny1)-1', 2'-dihydro-6'-hydroxy-6'-[(2-hydroxy-6-nitropheny1)azo]-4'-methyl-2'-oxo-1, 3'-bipyridiniumato(2-)]-, chloride (9C1) (CA INDEX NAME)

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L11 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

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L11 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

RN 100013-01-2 CAPLUS
CN Cobalt(14), bis[3-chloro-1',2'-dihydro-6'-hydroxy-5'-[[2-hydroxy-5(1,1,3,3-tetramethylbutyl))phenyl]azo]-4'-methyl-2'-oxo-1,3'bipyridiniumato(2-)]-, chloride (9CI) (CA INDEX NAME)

L11 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

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● c1 ·

RN 100013-02-3 CAPLUS (N chromium(1+), bis[4'-cyano-1',2'-dihydro-6'-hydroxy-5'-[[2-hydroxy-5-(methoxycarbony1) bhebyl]azo]-2'-oxo-1,3'-bipyridiniumato(2-)]-, chloride (9C1) (CA INDEX NAME)

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PAGE 3-A

 $\begin{array}{lll} 100013-03-4 & CAPLUS \\ Chromium (1+) & bis[5]^-[[4-(aminocarbony1)-2-hydroxypheny1]azo]-1', 2'-dihydroc'-hydroxy-3, 4'-dimethyl-2'-oxo-1, 3'-bipyridiniumato(2-)]-, chloride (9C1) & (CA INDEX NAME) \\ \end{array}$ 

L11 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

• C1 -

100013-04-5 CAPLUS Chromium(1+), bis[5]-[(5-acetyl-2-hydroxyphenyl)azo]-1',2'-dihydro-6'-hydroxy-4'-methyl-2'-oxo-1,3'-bipyridiniumato(2-)]-, chloride (9CI) (CA RDDK NAME)

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L11 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

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L11 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

PAGE 2-A

PAGE 3-A

 $\begin{array}{ll} 100013-05-6 & CAFLUS \\ Cobalt (1+), & bis[1'-btu]-5'-[[5-(1,1-dimethylethyl)-2-hydroxyphenyl]azo]-1', 2'-dihydro-6'-hydroxy-4'-methyl-2'-oxo-1, 3'-bipyridiniumato(2-)]-, chloride (9CI) & (CA INDEX NAME) \\ \end{array}$ 

PAGE 1-A

L11 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

N+

• C1 -

RN 100013-06-7 CAPLUS
CN Cobalt(1+), bis[5] =[(5-butoxy-2-hydroxyphenyl)azo]=1',2'-dihydro-6'hydroxy-4'-methyl-2'-oxo-1,3'-bipyridiniumato(2-)]-, chloride (9CI) (CA
DDEX NAME)

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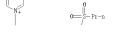
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L11 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN  $\,$  (Continued)

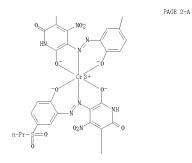
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L11 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

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RN 100039-66-5 CAPLUS CN Chromium(1+). bis[1', 2'-dihydro-6'-hydroxy-5'-[[2-hydroxy-5-(propylsulfonyl)phenyl]azo]-4'-nitro-2'-oxo-1, 3'-bipyridiniumato(2-)]-, chloride (9C1) (CA INDEX NAME)



 $100039-67-6 \quad CAPLUS \\ Chromium(1+), \quad bis[4'-bromo-5'-[(3,5-dichloro-2-hydroxyphenyl)azo]-1',2'-dihydro-6'-hydroxy-2'-oxo-1,3'-bipyridiniumato(2-)]-, \quad chloride \quad (9CI) \quad (CA DDEX NAME)$ 

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L11 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

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L11 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN

PAGE 3-A

IT 100039-65-4P
RL: IMF (Industrial manufacture); PREP (Preparation)
(preparation of, as dye for color electrophotog.)
RN 100039-65-4 CAPLIS
CN Chromium(1+), bis[5-[(3-chloro-2-hydroxy-5-nitrophenyl)azo]-1',2'-dihydro-6'-hydroxy-1',4,4'-trimethyl-2'-oxo-1,3'-bipyridiniumato(2-)]-, chloride
(9C1) (CA INDEX NAME)

L11 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN

(Continued)

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● C1-

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L11 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN

APPLICATION NO. DATE PI JP 60107655 JP 03002302 PRAI JP 1983-215083 GI 19850613 19910114 19831117 TP 1983-215083 19831117

## \* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

An electrophotog, toner contains, as a charge-controlling agent and a colorant, a 2:1 metal complex having the general structure I (R = H, Cl-4 alkyl or alkoxy, C2-5 alkoxycarbonyl, acylamino, aminocarbonyl, and anion anionation of the structure of the structur

PAGE 2-A

NHAc

L11 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

• C1 -

99294-20-9 CAPLUS Chromium(1+), bis[1-[1,2-dihydro-6-hydroxy-5-[(2-hydroxy-5-nitrophenyl)azo]-1,4-dimethyl-3-pyridinyl]-4-methylpyridiniumato(2-)]-, chloride (9CI) (CA INDEX NAME)

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L11 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

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99294-22-1 CAPLUS Chromium(1+), bis[1',2'-dihydro-6'-bydroxy-4'-methyl-2'-oxo-5'-[(2,3,5-trichloro-6-hydroxyphenyl)azo]-1,3'-bipyridiniumato(2-)]-, sulfate (2:1) (9C1) (CA INDEX NAME)

● C1 =

CM 1 CRN 99294-21-0 CMF C34 H20 C16 Cr N8 06 CCI CCS

PAGE 1-A

C1 Me N+

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L11 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

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RN 99294-25-4 CAPLUS
CN Chromium(1+), bis[5'-[(3-chloro-2-hydroxy-5-nitrophenyl)azo]-1',2'-dihydro6'-hydroxy-4,4'-dimethyl-2'-oxo-1'-phenyl-1,3'-bipyridiniumato(2-)]-,
perchlorate (9C1) (CA INDEX NAME)

CRN 99294-24-3 CMF C48 H34 C12 Cr N10 010 CCI CCS L11 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

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CM 2 CRN 14808-79-8 CMF 04 S

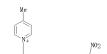
-0-1-0-

RN 99294-23-2 CAPLUS (Chromium(1+), bis[1',2'-dihydro-6'-hydroxy-5'-[(2-hydroxy-3,5-dinitrophenyl)a20]-4'-methyl-2'-oxo-1,3'-bipyridiniumato(2-)]-, bromide (9C1) (CA INDEX NAME)

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L11 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

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Ph

N

C1

C1

O
C1

Ph

Me

O2N

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L11 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

CM 2

CRN 14797-73-0 CMF C1 04

99294-27-6 CAPLUS Chromium(1+), bis[1',2'-dihydro-6'-hydroxy-5'-[(2-hydroxyphenyl)azo]-4'-methyl-2'-oxo-1,3'-bipyridiniumato(2-)]-, nitrate (9CI) (CA INDEX NAME)

CM 1

CRN 99294-26-5 CMF C34 H26 Cr N8 06 CCI CCS

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L11 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

> PAGE 2-A L — NHBu−n

PAGE 3-A

99294-30-1 CAPLUS Chromium(1+), bis[1',2'-dihydro-6'-hydroxy-5'-[[2-hydroxy-4-methoxy-at-ohony])-5-nitrophenyl]azo]-4'-methyl-2'-oxo-1,3'-bipyridiniumato(2-)]-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 99294-29-8 CMF C38 H28 Cr N10 014 CCI CCS

L11 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

CM 2

CRN 14797-55-8 CMF N 03

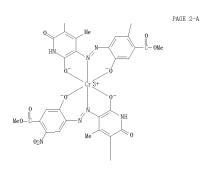
99294-28-7 CAPLUS Chromium(1+), bis[5]\*-[[4-[(butylamino)carbonyl]-2-hydroxy-5-nitrophenyl]azo]-4'-ethyl-1',2'-dihydro-6'-hydroxy-2'-oxo-1,3'-bipyridiniumato(2'-)]-, chloride (9C1) (CA INDEX MAME)

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L11 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

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L11 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

CRN 14797-73-0 CMF C1 04

99294-31-2 CAPLUS Chromium(1+), bis[1',2'-dihydro-6'-hydroxy-5'-[[2-hydroxy-5-(methylsulfonyl)bhenyl]azo]-d'-nitro-2'-oxo-1,3'-bipyridiniumato(2-)]-, bromide (9C1) (CA INDEX NAME)

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$$0 = \begin{array}{c} 0 \\ 0 \\ 0 \\ - \text{Me} \end{array} \qquad \begin{array}{c} 0 \\ 0 \\ 2 \\ N \\ \end{array}$$

L11 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

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PAGE 2-A

L11 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

PAGE 3-A

99294-33-4 CAPLUS Chromium(1+), bis[4'-cyano-1',2'-dihydro-6'-hydroxy-5'-[(2-hydroxy-5-nitrophenyl)azo]-2'-oxo-1,3'-bipyridiniumato(2-)]-, chloride (9CI) (CA INDEX NAME)

L11 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

PAGE 3-A ● C1 -

99294-34-5 CAPLUS Chromium(1+), bis[1',2'-dihydro-6'-hydroxy-5'-[(2-hydroxy-4-methoxy-5-nitrophenyl)az]-4'-methyl-2'-oxo-1,3'-bipyridiniumato(2-)]-, chloride (9C1) (CA INDEX NAME)

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PAGE 3-A

99294-35-6 CAPLUS Chromium(1+), bis[5'-[[5-(aminosulfony1)-2-hydroxypheny1]azo]-1',2'-dihydrox-4'-methyl-2'-oxo-1,3'-bipyridiniumato(2-)]-, chloride (9C1) (CA INDEX NAME)

L11 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

● C1-

 $99294-36-7 \quad CAPLUS \\ Chromium(1+), \quad bis[1-[5-[(4,5-dichloro-2-hydroxyphenyl)azo]-1,2-dihydro-6-hydroxyn_1-4-dimethyl-2-oxo-3-pyridinyl]-4-methylpyridiniumato(2-)]-, iodide (9CI) (CA INDEX NAME)$ 

PAGE 1-A

L11 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

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L11 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

PAGE 2-A

PAGE 3-A

 $99300-86-4 \quad CAPLUS \\ Chromium(1+), \ bis[1'-buty]-5'-[ (5-chloro-2-hydroxyphenyl) azo]-1',2'-dihydrox'-hydroxy-4'-methyl-2'-oxo-1,3'-bipyridiniumato(2-)]-, \ chloride (9C1) \quad (CA \ INDEX \ NAME)$ 

PAGE 1-A

L11 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN (Continued

N<sup>+</sup>

• c1 -

RN 99300-87-5 (APLUS (N Chromium(1+), bis[3-chloro-1',2'-dihydro-6'-hydroxy-5'-[(2-hydroxy-5-methyl-3-nitrophenyl)azo]-4'-methyl-2'-oxo-1,3'-bipyridiniumato(2-)]-, chloride (9C1) (CA INDEX NAME)

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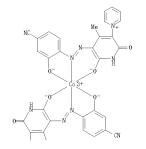
PAGE 2-A

L11 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

PAGE 3-A

RN 9300-88-6 CAPLUS CN Cobalt(1+), bis[5'-[(4-cyano-2-hydroxypheny1)azo]-1',2'-dihydro-6'-hydroxy-4'-methyl-2'-oxo-1,3'-bipyridiniumato(2-)]-, chloride (9CI) (CA INDEX NAME) L11 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN

(Continued)
PAGE 1-A



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RN 99613-49-2 CAPLUS
CN Cobalt(1+), bis[5 -[[5-(acetylamino)-2-bydroxy-3-nitrophenyl]azo]-1',2'dihydro-6'-hydroxy-4'-methyl-2'-oxo-1,3'-bipyridiniumato(2-)]-, chloride
(SC1) (CA INDEX NAME)

L11 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN (Continued

PAGE 1-A

L11 ANSWER 4 0F 5 CAPLUS COPYRIGHT 2008 ACS on STN  $\,$  (Continued)

• C1 -

RN 100039-67-6 CAPLUS
CN Chromium(1+), bis[4'-bromo-5'-[(3,5-dichloro-2-hydroxyphenyl)azo]-1',2'dihydro-6'-hydroxy-2'-oxo-1,3'-bipyridiniumato(2-)]-, chloride (9CI) (CA
INDEX NAME)

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L11 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

PAGE 3-A

● C1 -

L11 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN
AN 1980:130698 CAPLUS
N 92:1307a,21300a
TI Metalized azo dve
IN Eckersley, Dennis
Parial Chemical Industries Ltd., UK
SO Brit. UK Pat. Appl., 25 pp.
CODEN: BAXXDU
DT Patent
LE English
FAN.ON: 1
PATENT NO. KIND DATE APPLICATION NO. DATE
PATENT NO. KIND DATE APPLICATION NO. DATE
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$$\begin{array}{c|c} NO_2 & & & \\ & N=N \\ & & \\$$

Structure attributes must be viewed using STN Express query preparation. L15  $\,$  25 SEA FILE=REGISTRY SSS FUL L13  $\,$ 

100.0% PROCESSED 12 SEARCH TIME: 00.00.01 1116 ITERATIONS

25 ANSWERS

=> s 115 and caplus/lc 61200494 CAPLUS/LC L16 13 L15 AND CAPLUS/LC

12 L15 NOT L16

=> s 115 not 116

 $\Rightarrow$  d 1-12 ide can

- L17 RN ED CN
- ANSWER 1 0F 12 REGISTRY COPYRIGHT 2008 ACS on STN 791741-07-6 REGISTRY COPYRIGHT 2008 ACS on STN Entered STN: 02 Dec 2004 Chronium(1-4), bis[5 [(3-chloro-2-hydroxy-5-nitrophenyl)azo]-1',2'-dihydro-6'-hydroxy-1',4,4'-trimethyl-2'-oxo-1,3'-bipyridiniumato(2-)]- (9CI) (CA NDEX NAME) CSB B30 C12 Cr N10 010 CCS, COM CA

PAGE 1-A

PAGE 2-A 02N

ANSWER 2 OF 12 REGISTRY COPYRIGHT 2008 ACS on STN 785006-88-4 REGISTRY COPYRIGHT 2008 ACS on STN Chromium(1-1) Nov 2004 Chromium(1-1), bis[[-1],2-dihydro-6-hydroxy-5-[(2-hydroxy-5-nitrophenyl)azo]-1,4-dimethyl-3-pyridinyl]-4-methylpyridiniumato(2-)]-(931) (CA NIDEX NAME) CSS H32 Cr N10 010 CCS, COM CA

PAGE 1-A

PAGE 2-A

Answer 3 OF 12 REGISTRY COPYRIGHT 2008 ACS on STN 779996-70-2 REGISTRY Entered STN: 12 Nov 2004 Chromium(1+), bis[1', 2'-dihydro-6'-hydroxy-5'-[(2-hydroxy-3,5-dihtrophenyl)azo]-4'-methyl-2'-oxo-1,3'-bipyridiniumato(2-)]- (9CI) (CA INDEX NAME) C34 H22 Cr N12 014 CCS, COM CA L17 RN ED CN

PAGE 1-A

PAGE 2-A

ANSWER 4 OF 12 REGISTRY COPYRIGHT 2008 ACS on STN 773807-55-9 REGISTRY 2004 Entered STN: 01 Nov 2004 INDEX NAME NOT YET ASSIGNED C34 HIS Cr N12 010 CCS, COM L17 RN ED CN MF CI SR

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L17 RN ED CN

ANSWER 5 OF 12 REGISTRY COPYRIGHT 2008 ACS on STN 771434-29-8 REGISTRY Entered STN: 28 Oct 2004 Chromium(1+), bis[4'-cyano-1',2'-dihydro-6'-hydroxy-5'-[(2-hydroxy-5-nitrophenyl)azo]-2'-oxo-1,3'-bipyridiniumato(2-)]- (9CI) (CA INDEX NAME) C34 H18 Cr N12 010 CCS, COM CA MF CI SR

PAGE 1-A

PAGE 2-A

ANSWER 6 OF 12 REGISTRY COPYRIGHT 2008 ACS on STN 755711-98-9 REGISTRY COPYRIGHT 2008 ACS on STN 755711-98-9 REGISTRY Entered STN: 01 Oct 2004 Chromium(1+), bis[5-[[4-[(butylamino)carbonyl]-2-hydroxy-5-nitrobhenyl]azo]-4-ethyl-1', 2'-dihydro-6'-hydroxy-2'-oxo-1,3'-bipyridiniumato(2-)]- (9CI) (CA INDEX NAME) C46 H46 Cr N12 012 (CS, COM CA)

PAGE 1-A

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ANSWER 7 OF 12 REGISTRY COPYRIGHT 2008 ACS on SIN 754144-51-9 REGISTRY Entered SIN: 29 Sep 2004 Cobalt(1+), bis[5'-[[5-(acetylamino)-2-hydroxy-3-nitrophenyl]azo]-1', 2'-dihydro-6'-hydroxy-4'-methyl-2'-oxo-1, 3'-bipyridiniumato(2-)]- (9CI) (CA INDEX NAME) CSS 1800 Co N12 012 (CCS, COM CA L17 RN ED CN

L17 RN ED CN

ANSWER 8 0F 12 REGISTRY COPYRIGHT 2008 ACS on STN 750529-60-3 REGISTRY Entered STN: 24 Sep 2004 Chronium(14), bis[1', 2'-dihydro-6'-hydroxy-5'-[(2-hydroxy-4-methoxy-5-nitrophenyl)]20]-4'-methyl-2'-oxo-1,3'-bipyridiniumato(2-)]- (9CI) (CA NDEX MAND) C36 H28 Cr N10 012 CCS, COM CA

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ANSWER 9 0F 12 REGISTRY COPYRIGHT 2008 ACS on STN 747368-17-8 REGISTRY Entered STN: 17 Sep 2004 Chroniun(1-), bis[3-chloro-1',2'-dihydro-6'-hydroxy-5'-[(2-hydroxy-5-methyl-3-nitrophenyl)azo]-4'-methyl-2'-oxo-1,3'-bipyridiniumato(2-)]-(9CI) (CA INDEX NAME) C36 E36 C12 Cr N10 010 CCS, COM CA L17 RN ED CN

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ANSWER 10 0F 12 REGISTRY COPYRIGHT 2008 ACS on STN 744160-21-2 REGISTRY Entered STN: 13 Sep 2004 Chromium(1-4), bis[1 -(2-chlorophenyl)-1',2'-dihydro-6'-hydroxy-5'-[(2-hydroxy-5-nitrophenyl)azo]-4'-methyl-2'-oxo-1,3'-bipyridiniumato(2-)]-(3C) (CA NIDEX NAME) C46 H30 C12 Cr N10 010 CCS, COM CA

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L17 ANSWER 11 0F 12 REGISTRY COPYRIGHT 2008 ACS on STN
RN 98294-29-8 REGISTRY
D Entered STN: 30 Nov 1985
CN Chromium(1+), bigli', 2-dihydro-6'-hydroxy-5'-[[2-hydroxy-4-(methoxycarbony])-5-nitronhenyllazo]-4 -methyl-2 -oxo-1, 3'-bipyridiniumato(2-)]- (9CT) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Pyridinium, 1-[1, 2-dihydro-6-hydroxy-5-[[2-hydroxy-4-(methoxycarbonyl)-5-nitronhenyllazo]-4-methyl-2-oxo-3-pyridinyl]-, chromium complex
CS EDS Cr N10 014
SR CA

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L17 ANSWER 11 OF 12 REGISTRY COPYRIGHT 2008 ACS on STN (Continued)

L17 ANSWER 12 OF 12 REGISTRY COPYRIGHT 2008 ACS on STN

8N 96294-24-3 REGISTRY

8D Entered SIN: 30 Nov 1985

CN Chronium(1+), bis[5]-[(3-chloro-2-hydroxy-5-nitrophenyl)azo]-1,2'-dihydro-6'-hydroxy-4,4' dimethyl-2'-oxo-1'-phenyl-1,3'-bipyridiniumato(2-)]- (9CI)

CA INDEX NAMES:

CN 1,3'-Bipyridinium,5'-[(3-chloro-2-hydroxy-5-nitrophenyl)azo]-1',2'-dihydro-6'-hydroxy-4,4'-dimethyl-2'-oxo-1'-phenyl-, chromium complex

FF C48 H34 C12 Cr N10 010

SR CA

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No 2

L17 ANSWER 12 OF 12 REGISTRY COPYRIGHT 2008 ACS on STN (Continued)

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=> s 115 L18 3 L15

=> d 1-3 bib abs hitstr

- ANSWER 1 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN 2003:792203 CAPLUS 141:32818 Synthesis and absorption properties of some new azo-metal chelates and their ligands
- AU CS

- Synthesis and absorption properties of some new azo-metal chelates and their ligands
  Synthesis and absorption properties of some new azo-metal chelates and their ligands
  Song, Haifeng; Chen, Kongchang; Wu, Dongaing; Tian, He
  Institute of Fine Chemicals, Bast China University of Science and Technology, Shanghai, 2002%, Peop. Rep. China
  Dons and Figuretic 2003, Volume Date 2004, 60(2), 111-119
  CONGRETEDIA; ISSN 0143-7208
  Elsevier Science Ltd.
  Journal
  Buglish
  CASERACT 141:32818
  Azo-metal chelates ML2 (W = Ni, Cr. Co; HL = A-N:N-B; A and/or B = substituted thiaxolyl-, thiadiazolyl, phenoxyl-, hydroxypyridonyl-, nanbtholyl- and barbiturate) were synthesized. Their structures were confirmed by IR spectra, MS spectra and UN-visible spectra. Their solubility in 4-hydroxy-4-methyl-2-pentanone and absorption properties of films were measured. The influence on the difference of absorption maximum from azo-metal chelates to their ligands by diazo components, coupling components and metal ions was studied.

  700814-43-3-3P
  RL: SPN (Synthetic preparation); PREP (Preparation)
  (preparation and absorption properties of azo-metal chelates)
  700814-43-3 CAPLUS
  Chronium, bis[1-ethyl-1, 2-dihydro-6-(hydroxy-KO)-5-[[2-(methoxy-KO)-4-mitrophenyl]azo-KN]-4-methyl-2-oxo-3pyyridinecarbonitrilato]-, (OC-6-22')- (SCI) (CA INDEX NAME)
- IT

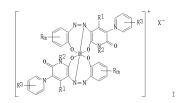
THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT RE. CNT 18

L18 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN (Continued) PAGE 1-A

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PATENT NO. KIND DATE APPLICATION NO. DATE PI JP 60106859 JP 04050945 PRAI JP 1983-212603 GI 19850612 19920817 TP 1983-212603 19831114

19831114



AB

methacrylate-styrene copolymer and caroon black, providing very bright images. 100012-96-2 100013-00-1 KE: USES (Uses) (dye, for color electrophotog., preparation of) 100012-96-2 CAPLUS (Chromium(1+), bis[4] -cyano-1', 2'-dihydro-6'-hydroxy-5'-[(2-hydroxy-5-nitrophenyl)azo]-2'-oxo-1, 3'-bipyridiniumato(2-)]-, bromide (9CI) (CA INDEX NAME)

L18 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

PAGE 3-A

 $\begin{array}{ll} 100013-00-1 & CAPLUS \\ Chromium(1+) & bis[1] - (2c-chloropheny1)-1', 2'-dihydro-6'-hydroxy-5'-[ (2-hydroxy-5-nitropheny1)azo]-4'-methy1-2'-oxo-1, 3'-bipyridiniumato (2-)]-, chloride (9CI) & (CA INDEX NAME) \\ \end{array}$ 

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L18 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN

L18 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN

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DATE

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100039-65-4P RL: NDF (Industrial manufacture): PREP (Preparation) (preparation of, as dye for color electrophotog.) 100039-65-4 CAPLIS (Chromium(1+), bis[5] -[(3-chloro-2-hydroxy-5-nitrophenyl)azo]-1',2'-dihydro-6-hydroxy-1,4,4'-trimethyl-2'-oxo-1,3'-bipyridiniumato(2-)]-, chloride (9C1) (CA INDEX NAME)

N02

L18 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

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● C1 =

L18 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN
AN 1985:624587 CAPLUS
N 103:224587
OREF 103:36013a, 36016a
I Electrophotographic toner
PA Hodogaya Chemical Co., Ltd., Japan
SO Jon. Kokai Tokkyo Koho, 8 pp.
CODEN: IXXXAF
T Patent
LA Japanese
FAN.CNI 1
PATENT NO. KIND DATE APPLICATION APPLICATION NO PI JP 60107655 JP 03002302 PRAI JP 1983-215083 GI 19850613 19910114 19831117 JP 1983-215083

- \* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRINT \*
- An electrophotog, toner contains, as a charge-controlling agent and a colorant, a 2:1 metal complex having the general structure I (R = H, Cl-4 alkyl or alkoxy, C2-5 alkoyacatonyl, acylamino, aminocatonyl, aninosulfonyl, C2-5 alkylaminocatonyl, C1-3 alkylsulfonyl, NO2, CN, halo; m = 1-4: K groups may not be identical to each other when m ≥ 2; Kl = H, Cl-4 alkyl, aninosulfonyl, C0-5, ke, Et, Pr; K2 = H, Cl-10 alkyl, (substituted) Ph; K3 = H, Cl-4 alkyl, halo; M = CT, C0; X = anion). These azo dyes have advantages in stability and durability over frequently used nigrosine dyes. Thus, II 2 and C black 10 parts were mixed with Bu methacrylate-styrene copolymer 100 parts, kneaded, cooled, and pulverized to obtain a toner (15-25 Hm). The toner 1 part was mixed an Fe powder 20 parts to give an electrophotog, developer showing an average charge capacity of 17.6 H/Cg and producing good quality copies.
  99204-20-9 99294-23-2 99294-25-4
  99294-34-5 99300-87-5 99313-49-2 Kl: TEM (Fechnical or engineered material use): USES (Uses)
  (electrophotog, toners containing, for improved charge control and stability)
  99294-20-9 CPUSC
  Chromium(1+), bis[1-1], 2-dihydro-6-bydroxy-5-[(2-hydroxy-5-nitrophenyl)azo]-1, 4-dimethyl-3-pyridinyl]-4-methylpyridiniumato(2-)]-, chloride (9CI) (CA INDEX NAME)

L18 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN

L18 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

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● C1 -

99294-23-2 CAPLUS Chromium(1+), bis[1,2'-dihydro-6'-hydroxy-5'-[(2-hydroxy-3,5-dinitrophenyl)azo]-4'-methyl-2'-oxo-1,3'-bipyridiniumato(2-)]-, bromide (9C1) (CA INDEX NAME)

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L18 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

L18 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

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99294-25-4 CAPLUS Chromium(1+), bis[5'-[(3-chloro-2-hydroxy-5-nitrophenyl)azo]-1',2'-dihydro-6'-hydroxy-4,4'-dimethyl-2'-oxo-1'-phenyl-1,3'-bipyridiniumato(2-)]-, perchlorate (9CI) (CA INDEX NAME)

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CM 1 CRN 99294-24-3 CMF C48 H34 C12 Cr N10 010 CCI CCS

PAGE 3-A

CM 2

CRN 14797-73-0 CMF C1 04

RN 99294-28-7 CAPLUS
CN Chromium(1+), bis[5'-[[4-[(butylamino)carbonyl]-2-hydroxy-5-nitrophenyl]aco]-4'-ethyl-1',2'-dihydro-6'-hydroxy-2'-oxo-1,3'-bipyridiniumato(2-)]-, chloride (9C1) (CA INDEX NAME)

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L18 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

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L18 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN (Continued

RN 99294-30-1 CAPLUS
CN Chromium(1+), bis[1',2'-dihydro-6'-hydroxy-5'-[[2-hydroxy-4-(methoxy-arbony])-5-nitropheny]]azo]-4'-methyl-2'-oxo-1,3'-bipyridiniumato(2-)]-, perchlorate (9CI) (CA INDEX NAME)

CM 1 CRN 99294-29-8 CMF C38 H28 Cr N10 014 CCI CCS

L18 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN (Continued) CM 2

CRN 14797-73-CMF Cl 04

RN 99294-33-4 CAPLUS CN Chromium(1+), bis[4'-cyano-1',2'-dihydro-6'-hydroxy-5'-[(2-hydroxy-5nitrophenyl)azo]-2'-oxo-1,3'-bipyridiniumato(2-)]-, chloride (9CI) (CA INDEX NAME)

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• c1

RN 99294-34-5 CAPLUS CN Chromium(1+), bis[1',2'-dihydro-6'-hydroxy-5'-[(2-hydroxy-4-methoxy-5-nitrophenyl)azo]-4'-methyl-2'-oxo-1,3'-bipyridiniumato(2-)]-, chloride (9C1) (CA INDEX NAME) L18 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

PAGE 1-A

NO<sub>2</sub> Me N+

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L18 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

PAGE 3-A

N<sup>+</sup>

● C1 -

RN 99000-87-5 CAPLUS
CN Chromium(1+), bis[3-chloro-1',2'-dihydro-6'-hydroxy-5'-[(2-hydroxy-5-methyl-3-nitrophenyl)azo]-4'-methyl-2'-oxo-1,3'-bipyridiniumato(2-)]-, chloride (9CI) (CA INDEX NAME)

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L18 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

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C1

• c1 -

RN 99813-49-2 CAPLUS
CN Cobalt(1+), bis[5'=[[5-(acetylamino)-2-hydroxy-3-nitrophenyl]azo]-1', 2'dihydro-6'-hydroxy-4'-methyl-2'-oxo-1, 3'-bipyridiniumato(2-)]-, chloride
(9c1) (CA INDEX NAME)

L18 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

PAGE 1-A

L18 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

PAGE 3-A

N<sup>+</sup>

● C1 -

PAGE 2-A

$\Rightarrow$ $\Rightarrow$ d que				
L19		SEA FILE=CAPLUS ABB=ON		
L20		SEA FILE=CAPLUS ABB=ON		
L21	16	SEA FILE=CAPLUS ABB=ON	PLU=ON	"NOGUCHI AYASHI"/AU
L22	122	SEA FILE=CAPLUS ABB=ON	PLU=0N	L19 OR L20 OR L21
L23	19	SEA FILE=CAPLUS ABB=ON	PLU=0N	L22 AND CYANINE

<sup>=&</sup>gt; d 1-19 bib abs

L23 ANSWER 1 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN AN 2008:1075590 CAPLUS DN 149:334046 T1 Cyanine dyes for blue laser optical recording media T1 Cyanine dyes for blue laser optical recording media TN Shoda, Hisashi; Uchida, Maoyuki; Furomoto, Shigeyuki; Aizawa, Yasushi; Dan-Ob, Yasufumi; Toki, Masahiko A Katustau Kaguku Media Co., Ltd., Japan; Kabushiki Kaisha Hayashibara Scibutsu Kaguka Hedia Co., Ltd., Japan; Kabushiki Kaisha Hayashibara Scibutsu Kaguka Hedia Co., Ltd., Japan; Kabushiki Kaisha Hayashibara CODEN: PIXXD2 D F7I Lat. LA Japanese FAN.CNT 1										
		KIND DATE	APPLICATION NO.	DATE						
PI	CA. CH, CN, FI. GB, GD, KG, IOM, ION, MC, MG, MG, PL, PT, RO, TN, TR, TT, RW: AT, BE, BG, IE, IS, IT, TR, BF, BI, TG, BW, GH, AM, AZ, BY, JP 200823973	CO. CR. CU. CZ. GE. GH. GM. GT. KP. KR. KZ. LA. MN. MW. MX. MY. KS. RU. SC. SU. TZ. UA. UG. US. CH. CY. CZ. DE. LT. LU. LV. MC. LT. LU. LV. MC. CM. KB. LS. MW. KB. LS. MW. KB. KZ. MD. RU. A 20081009	AZ, BA, BB, DS, BH, BR, DB, DB, DM, DM, DO, DZ, EC, BM, HR, HU, DD, TL, IM, CC, LK, LR, LS, LT, LU, MR, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA	BE, EG, ES, IS, JP, KE, LY, MA, MD, OM, PG, PH, SY, TJ, TM, GR, HR, HU, SE, SI, SK, NE, SN, TD,						

AB The present invention relates to cyanine dyes (I), wherein Al.

Bl = independently (un)substituted aromatic ring (at least one aromatic ring of Al and Bl contains a nitrogen atom); Rl, R2 = independently substituent
(Rl and/or R2 may be bonded with another cation); Xl, X2, X3, X4 = independently organic group (Xl and X2 and/or X3 and X4 may combine together to form a ring structure); Yl = H or organic group: ad Z = anion. Thus, 3.7 g 2.3-dipydro-1,3,3-trimethyl-2-methylene-IH-pytrolo[2,3-5]pytidine and 5.8 g 2-f (mydroxyminno)methyl)=1,3,3-trimethyl-3-finedolum perchlorate were heated at 90° for 1 h to give a cyanine compound with decomposition point 255°, Amaz 424.5 tmm, and absorption coefficient 3.74 + 105 at 424.5 tmm.

RE.ONT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

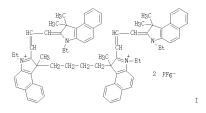
L23 ANSWER 2 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN ALL CITATIONS AVAILABLE IN THE RE FORMAT (Continued) L23 ANSWER 2 OF 19 CAPLUS COFYRIGHT 2008 ACS on STN
AN 2007:14699865 CAPLUS
N 148:109124
ILight-shielding agent containing cyanine dye
N Yano, Kentaro: Nagraike, Historia: Ibara, Junichiro; Aizawa, Yasushi
PA Kabushiki Kaisha Havashibara Seibutsu Kagaku Kenkyujo, Japan
CODEN: PIXEND
D Patent
LA Japanese
FAN, NN 1
PATENT NO PT

AB An object is to provide a light-shielding agent which can effectively intercept an undesirable artificial light (particularly, a near IR ray) emitted from an image display device, which can also effectively intercept a near IR ray in natural light, and which is excellent in solubility in an organic solvent, light resistance and environment resistance, and also provide use of the light-shielding agent. Another object is to elongate the absorption wavelength of a cyanine day and achieve a desirable absorption wavelength in the cyanine dye. Thus, disclosed is a light-shielding agent comprising a cyanine dye having a sulfonyl group at the meso-position represented by the general formula I (Z1 and Z2 = moncoyclic of itsed-cyclic aromatic or heterocyclic ring which may have substituent; R1-6 = aliphatic hydrocarbon group or aromatic hydrocarbon group which may have substituent, rowided that R3 and R4 or R5 and R6 may together form 3- to 8-membered ring; R7 = hydrogen atom or substituent; L = group of atoms required for the formation of cyclic structure; Rm = counter ion having valency of m; m = integer ranging from 1 to 3; and c = 0 or 1 HERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD

ANSWER 3 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN 2007:1062481 CAPLUS 147:367020 DN 147:367020

II Methine dyes with good light resistance, thermal stability, and solubility IN Dan-Oh, Yasufumi; Toki, Masahiko; Yano, Kentaro; Aizawa, Yasushi FA Kabushiki Kaisha Hayashibara Seibutsu Kagaku Kenkyujo, Japan CODN: PIXXD2

DT Patent
L Japanese
FAN. ONT 2
PATENT NO. PATENT NO KIND DATE APPLICATION NO DATE



L23 ANSWER 3 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN (Continued) range rays have a bisindolenine skeleton composed of two indolenine rings bonded together via the 3-position carbon atom of each of the indolenine rings by means of a divalent linkage group. Thus, 40 g, 3,8-dimethyl-2,9-decanedione and 76.6 g,2-mabhthalenyl-hydrazine were reacted in the presence of concl. HCl and neutralized with NaOH to give an indolenine compd., 12.5 g of which was reacted with 16.9 g Bt p-toluenesulfonate, further reacted with 3-ethyl-1,1-dimethyl-2-[2-(phenylamino)ethenyl]-lH-beng[e]indolium p-toluenesulfonate, and treated with amonium hexafluorophosphate to give a methine dye I, showing m.p. 250°, decompn. temp. 300°, and 3.4 tertafluoro-l-propanol, good light resistance, and recording sensitivity and elec. characteristics when fabricated into an optical recording medium.

sensitivity and elec. characteristics when isolicated into an of recording medium.

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 4 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

The invention relates to a novel organic compound that absorbs light of UV to IR region, excelling in lightfastness and solvent solubility, and that has thermal properties corresponding to uses in which the same finds application; and uses of the novel organic compound. There are provided indolenine counds, each having a bisindolenine skeleton composed of two indolenine rings bonded to each other via 3-position carbon atoms of the individual indolenine rings by a bivalent linkage group, and provided relevant methine dyes and optical recording media comprising the methine dyes. Thus, 40 g 3,8-dimethyl-2,9-decanedione and 76.6 g

2-maphthalenyl-hydrazine were reacted in the presence of concentrated HCl and neutralized with NaOH to give an indolenine compound, 12.5 g of which was reacted with 16.9 g Bt p-toluenesulfonate, further reacted with 3-ethyl-1,1-dimethyl-2-[2-(phenylamino) ethenyl]-IH-benz[e]indolium p-toluenesulfonate, and treated with ammonium hearfluoronbosphate to give a methine dye I, showing m.p. 252°, decomposition temperature 300°, n. Amax 544 rm, absorption coefficient 1,94 + 105, solubility 2,06 in 100 mL 2, 2, 3,3-tetrafluoro-l-propanol, good light resistance, and recording sensitivity and elec. Characteristics when fabricated into an optical recording medium.

Note that the sum of the properties of the pr AB

sensitivity atto elecrecording medium.
RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

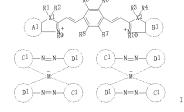
L23 ANSWER 4 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN AN 2007:1061140 CAPLUS DN 147:387845 IMMEDIA STRAIN STR																	
	PATENT	NO.			KIND DATE				APPLICATION NO.						DATE		
PΙ	WO 2007	1053	36		A1 20070920				WO 2006-JP322149						20061107		
	₩: RW:	AE, CN, GE, KP, MN, RS, TZ, AT, IS, CF, GM,	AG, CO, GH, KR, MW, RU, UA, BE, IT, CG, KE.	AL, CR, GM, KZ, MX, SC, UG, BG, LT, CI,	AM, CU, GT, LA, MY, SD, US, CH, LU, CM,	AT, CZ, HN, LC, MZ, SE, UZ, CY, GA,	AU, DE, HR, LK, NA, SG, VC, CZ, MC,	AZ, DK, HU, LR, NG, SK, VN, DE, NL, GQ, SD.	BA, DM, ID, LS, NI, SL, ZA, DK, PL, GW, SL,	BB, DZ, IL, LT, NO, SM, ZM, EE, PT, ML, SZ,	BG, EC, IN, LU, NZ, SV, ZW ES, RO, MR, TZ,	BR, EE, IS, LV, OM, SY, FI, SE, NE, UG.	BW, EG, JP, LY, PG, TJ, FR, SI, SN, ZM,	BY, ES, KE, MA, PH, TM, GB, SK, TD, ZW,	BZ, FI, KG, MD, PL, TN, GR, TR, TG,	CA, GB, KM, MG, PT, TR, HU, BF, BW, AZ,	CH, GD, KN, MK, RO, TT, IE, BJ, GH, BY,
		KG,	KZ,	LS, MD,	RU,	MZ, TJ,	TM	-	DL,				-	47,	-	-	-
	WO 2007	1052 AE,	97 AG,	AL.	A1	AT.	2007 AU,	0920 AZ,	BA.	WO 2 BB.	006- BG,	JP30 BR,	4913 BW.	BY,	BZ,	0060 CA	313 CH.
	•	CN, GE, KZ, MZ, SG, VN.	CO, GH, LC, NA, SK, YU,	CR, GM, LK, NG, SL, ZA,	CU, HR, LR, NI, SM, ZM,	CZ, HU, LS, NO, SY,	DE, ID,	DK, IL, LU, OM, TM,	DM, IN, LV, PG, TN,	DZ, IS, LY, PH, TR,	BC, JP, MA, PL, TT,	EE, KE, MD, PT, TZ,	EG, KG, MG, RO, UA,	ES, KM, MK, RU, UG,	FI, KN, MN, SC, US,	GB, KP, MW, SD, UZ,	GD, KR, MX, SE, VC,
PRA: OS GI	RW: I WO 2006 MARPAT	AT, IS, CF, GM, KG,	BE, IT, CG, KE, KZ, 0491	BG, LT, CI, LS, MD,	CH, LU, CM, MW, RU,	CY, LV, GA, MZ, TJ,	GN,	DE, NL, 6Q, SD,	DK, PL, GW, SL,	EE, PT, ML, SZ,	ES, RO, MR, TZ,	FI, SE, NE, UG,	FR, SI, SN, ZM,	GB, SK, TD, ZW,	GR, TR, TG, AM,	HU, BF, BW, AZ,	IE, BJ, GH, BY,

ANSWER 5 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN 2007:802395 CAPLUS 147:517399 AN DN TI AU 141.317393 Two-color in vivo dynamic contrast-enhanced pharmacokinetic imaging Hama, Yukihiro; Koyama, Yoshinori; Choyke, Peter L.; Kobayashi, Hama, Tukiniro, Aoyama, Toshinori, Choyke, Peter L., Nobayashi, Hisataka
National Cancer Institute, Center for Cancer Research, Molecular Imaging Program, NIH, Bethesda, MD, 20892-1088, USA
Journal of Biomedical Optics (2007), 12(8), 034016/1-034016/7
C00DN: JBOPO: ISSN: 1083-3668
SFIE-The International Society for Optical Engineering
Journal SO PB SPIE-The International Society 10.0 Operation of the Country of Spiece and Spiece and

AB Disclosed is an optical recording medium (e.g., optical disk) capable of recording/reproducing high-d, optical information by using a short wavelength light such as a blue laser. The optical recording medium comprises ≥1 substrate and a recording layer which is formed on the substrate and capable of recording or reproducing information by irradiation of light. The recording layer contains an azazyanine dye I [R], R2 = H, (um) substituted Cl-4 alkyl: R1 and R2 may combine together to form a ring structure; R3 = H, hydrocarbon group; R4 = H, Cl-4 alkyl; R5 =

L23 ANSWER 6 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
(un)substituted arom ring group or unsatd. heterocyclic group; R4 and R5
may combine together to form a ring structure; X = counter anion; the
benzene ring A may be substituted].

RE.CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT



AB The dye I (R1-8 = H, substituent; R9-10 = aliphatic group which may be substituted; X1-2 = C, O, N, S; Al, Bl = aromatic group which may be substituted; X1-2 = C, O; N, S; Al, Bl = aromatic group which may be substituted; X1 of Cl and Dl is heterocycle; M = transition metal) comprises a cationic part of cyanine dye having bisstryl group and an anionic part of azo-metal complex. The material contains the dye and recorded and read by 300-500 mm wavelength light. The material shows high sensitivity, durability and rapid recording using short wavelength laser beam.

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ANSWER 9 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:1226942 CAPLUS
DN 145:507110
T1 Cyanine colorants with good lightfastness, solubility, and heat characteristics for optical recording media
N Aizawa, Yasushi; Ito, Michiei Dan-Ob, Yasufumi; Yano, Kentaro; Shoda, Hisashi; Satake, Kenichi; Uchida, Naoyuki
N Kabushiki Kaisha Hayashibara Seibutsu Kagaku Kenkyujo, Japan CODEN: PIXXD2
DT Patent
LA Japanese
FAM.ON 1
PATENT NO. KIND DATE APPLICATION NO. DATE
                     PATENT NO.
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PATENT NO.

PI W: AE, AG, AL

W: AE, AG, AL

CA, CO, CR

GE, GH, GM

KZ, LC, LK

SG, SK, SL

VM, YU, ZA

RW: AT, BE, BG

LG, KG, KG, KG, KG

RW: AT, BE, BG

LG, KG, LG, KG

KG, KZ, MD

RP 1897915

EP 1897915

EP 1897915

PRAI JP 2005-147544

WO 2006-JP510061

OS

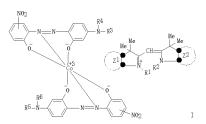
MARPAT 145:507110
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20080604
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CN 2006-80020087
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20071206
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20060519
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- \* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRINT \*
- \*SINUCTURE DIAGRAM TOO LAKEE FOR DISPLAY AVAILABLE VIA OPPLINE PRINT \*

  AB Title cyanine compds. I which absorb short-wavelength visible light can be used as a light absorbing material in a wide variety of applications including information recording, solar power generation, elec. machineries and apparatus, elec. communication equipment, obtain equipment, clothing materials, building and bedding products, healthy and equipment, clothing materials, building and bedding products, healthy and media, wherein RI, RZ, RS, R4, R6, R6 = (up) substituted hydrocarboni R7, R8 = H or substituent; and X = transition metal (Group 5-Group 12) complex. Thus, 1.8 g a compound III and 2.6 g a compound III were refluxed in acetic anhydride, 0.7 g of the resulting compound was reacted with 0.9 g a metal azo complex to give a cyanine colorant IV, showing m. D. 190°, decomposition temperature 250°, %max 469 mm (extinction coefficient 8.62 + 104), and good solubility in organic solvents and light resistance.

  RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L23 ANSWER 10 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN (Continued) being selected as a light absorbing material in the above-mentione fields.
- THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT RE. CNT 10

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L23 AN DN TI IN PA SO DT LA	AN 2005:1075866 CAPLUS N 143:348676 TI Light-resistant cyanine pigment IN Aizawa, Yasushi; Koyama, Yoshinori; Noguchi, Ayashi PA Kabushiki Kaisha Hayashibara Seibutsu Kagaku Kenkyujo, Japan SO PCT Int. Appl., 22 pp. CODEN: PIXXD2 D Patent										
FAN.	CNT 1 PATENT NO.	KIND DATE	APPLICATION NO.	DATE							
PI PRAI OS GI	W: AE, AG, AL, W: AE, AG, AL, CO, CR, GE, GH, GM, LK, LR, LS, NO, NZ, OM, RW: BW, GH, GM, EE, ES, FI, RO, SE, SI, RO, SE, SI, RO, SE, SI, MR, NE, SN, JP 2004-9113 MARPAT 143: 3486 76	CU, CZ, DE, DK, D HR, HU, ID, IL, I LT, LU, LV, MA, M PG, PH, PL, PT, R TN, TR, TT, TZ, U KE, LS, MW, MZ, N KZ, MD, RU, TJ, T FR, GB, GR, HU, I	M, DZ, BC, BE, BG, E; N, IS, JP, KE, KG, K; D, MG, MK, MN, MW, MW, M, US, US, US, VC, VI A, SD, SL, SZ, TZ, U								



A cyanine pigment I [Z1, Z2 = (un)substituted monocyclic aromatic ring; Z2 = monocyclic or fused polycyclic aromatic ring; R1, R2 = (un)substituted aliphatic hydrocarbyl] exhibits a main local maximum in the absorption spectrum thereof at a wave length longer than 400 rm, in the state of a liquid The cyanine pigment absorbs a visible light having a short wave length, is excellent in the resistance to a light and the solubility to a solvent, and, also has thermal characteristics meeting requirements of new fields wherein organic pigment compds. are applied, which results in the expansion of the width of organic pigment compds. capable of

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ANSWER 11 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN 2005:979709 CAPLUS 145:268200 Short visible light absorbing cyanine dyes with good light resistance and solubility Aizawa. Yasushi; Koyama, Yoshinori; Neguchi,
               IN
         FAN. ONT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

PI WO 2006085011 Al 20060909 WO 2005-JF2978 20050224

W: AE, AG, AL, AM, AT, AL, AZ, BA, BB, BB, BR, BW, BY, BZ, CA, CH, CA, CO, CR, CU, CZ, DE, DK, MD, Z, EC, EE, EB, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JF, KE, KG, KF, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MA, MW, MX, MZ, AN, NI, MO, NZ, OM, FG, FH, FL, FT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, ID, LB, US, UZ, CV, NY, VI, ZA, ZM, ZW, RW: BW, GH, GM, KE, LS, MW, MZ, AW, AS, DS, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, MA, TB, BB, GL, CY, CZ, DE, DK, EB, SF, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, FL, FT, NO, SE, SI, SK, TR, FB, BJ, CF, GC, LC, MG, GM, GQ, GW, ML, MR, MR, SS, NL, TD, TG

EP 1734088, GA, 10 20061220 EP 2005-710629 20050224

RN 2007015132 A 20070201 KR 2006-717173 20060825

IN 2006CN03552 A 20070622 IN 2006-R03552 20060262

US 20080000034 Al 2008103 US 2007-E90896 20070613

FRAI IP 2004-63296 A 20040237

IP 2004-173663 A 20040217

IP 2004-173663 A 2004021

ST 11 2004-173663 A 2004021

ST 11 2006-172078 W 20060224

OS MARPAT 143:2683200

MARPAT 143:268320

MARPAT 143:268320 A 20040611

WO 2005-JF2978 W 20060224

OS MARPAT 143:268320 A 20040618

The Leynnine dyes have a specific structure and exhibit the primary local maximum of absorption in the region of a wavelength ≥400 mm in the state of a solution Thus, 2 κ, 2 classed the service of the primary local maximum of absorption in the region of a wavelength ≥400 mm in the state of a solution Thus, 2 κ, 2 classed the service of the primary local maximum of absorption in the region of a wavelength ≥400 mm in the state of a solution Thus, 2 κ, 2 classed the service of the primary local maximum of absorption in the region of a wavelength ≥400 mm in the state of a solution Thus, 2 κ, 2 classed the service of the primary local maximum of absorption in the Reploy of the primary local maximum of absorption Thus, 2 κ, 2 classed the primary local maximum of absorption Thus, 2 
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L23 ANSWER 12 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2005:449678 CAPLUS
DN 142:472671
IT Write-once read-many optical disk containing rhoda-cyanine dye
suited for short wavelength recording
N Sasa, Noboru; Kawada, Toshic; Alzawa, Yasushi
PA Ricoh Co., Ltd., Japan; Hayashibara Biochemical Laboratories, Inc.
SO Jpn. Mokal Tokkyo Koho, 23 pp.
COUNT: NAXAF
DT Patent
LA Japanese
FAN. CNT 1
PATENT NO.
                    PATENT NO
                                                                                                                                    APPLICATION NO
                                                                             KIND DATE
                                                                                                                                                                                                     DATE
     PI JP 2005131816
PRAI JP 2003-367627
OS MARPAT 142:472671
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                                                                                               20050526
20031028
                                                                                                                                JP 2003-367627
                                                                                                                                                                                                        20031028
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The material comprises a support successively having a recording layer containing rhoda-cyanine dye I [XI-2 = 0, S, Se, CH:CH, CR4R5, NR6; YI = 0, S, SE, NR7; RI, RS = alkyl; RZ = alkyl, aryl, heterocycle; ZI = atoms to form benzene, naphthalene, anthracene, phenanthrene ring; Z2 = atoms to form  $5^{\circ}$  or  $6^{\circ}$ -membered ring; LI-3 = methine; R4-5 = alkyl; R6-7 = alkyl, aryl; 0 = anion; k = 1, 2; n = 0-1] and a reflection layer, and the material is recorded by increasing the reflectivity of the recorded area using \*500 nm light. The material may successively have a reflection layer, the recording layer, and a cover layer. The material has a recording layer containing I and an interference layer, and is recorded by decreasing the reflectivity of the recorded area using \*500 nm light. The material may successively have an interference layer, the recording layer, and a cover layer. The material is recorded and read by shorter wavelength, especially by near 405 nm light.

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ANSWER 14 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN 2003:262100 CAPLUS 138:278500
DN 158:278500 CATLUS
TI Solvent composition containing alcohols and organic dyes for manufacture of rewritable optical recording disk
I hara, Junichiro; Aizawa, Yasushi; Kawata, Toshio; Okazaki,
Tauneki
PA Kabushiki Kaisha Hayashibara Seibutsu Kagaku Kenkyujo, Japan
SO PCT Int. Apol., 47 pp.
COODEN: PIXXD2
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PATENT NO. KIND DATE APPLICATION NO. DATE

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10 2003028019 A1 20030408 W0 2002-JP9636 20020919

W: JP, KR
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT,
LU, MC, NL, PT, SE, SK, TR

PRAI JP 2001-287234 A 20010920

AB ASOLVent composition with which an organic-based optical recording medium capable of high-speed writing and meeting the CD-R standard or DVD-R standard can be produced at low cost. It comprises one or more fluorinated aliphatic ales. and one or more norluorinated organic solvents. The solvent composition is useful for producing an optical recording medium employing an organic pigment compound, preferably an azo metal complex, formacan metal complex, cyanine dye, azo dye, phthalocyanine dye, or porphyrin dye.

RE. CNI 21 THERE ARE AE 1 CITED REFRENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT
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ANSWER 13 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2005:74159 CAPLUS
DN 142:157826 THE CAPLUS
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TO REAL RESEARCH TO THE CAPLUS AND THE CAPLU PATENT NO. APPLICATION NO KIND DATE DATE GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB. The dyes can be used as light absorbents, are obtained from dye compds. in which multiple cyanine dye skeletons bonded to each other through a bivalent group and an organometallic complex as a counter ion, where the cyanine dyes and programmetallic complex as a counter ion, where the cyanine dyes and organometallic complex as a counter ion, where the cyanine dyes and organometallic complex as a counter ion, where the cyanine dyes and the counter in the counter of substantially absorbing light of wavelength larger than 70m mm. Thus, heating I with II in MeOH in the counter of Ac20 mm between the compound in the counter of Ac20 mm between the counter of th

L23 AN	ANSWER 15 OF 19 CA 2002: 487688 CAPLUS		OPYRIGHT 200	8 ACS on STN					
DN	137:70549								
TI	Light absorbing age	nt cont.	aining nolym	ethine-based dve a	nd formazan metal				
	complex		arming posym						
IN	Koyama, Yoshinori;	Aizawa,	Yasushi; Ka	wata, Toshio;					
	Yasui, Shigeo								
PA	Kabushiki Kaisha Hayashibara Seibutsu Kagaku Kenkyujo, Japan								
S0	PCT Int. Appl., 54	pp.							
	CODEN: PIXXD2								
DT	Patent								
LA	Japanese								
FAN.	CNT 1								
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE				
ΡI	WO 2002050210	A1	20020627	WO 2001-JP11107	20011218				
	W: JP, KR, US								
	RW: AT, BE, CH,	CY, DE	, DK, ES, FI	FR, GB, GR, IE,	IT, LU, MC, NL,				
	PT, SE, TR								
	EP 1347030	A1	20030924	EP 2001-271421	20011218				
	R: AT, BE, CH,		, ES, FR, GB,	GR, IT, LI, LU,	NL, SE, MC, PT,				
	IE, FI, CY,	TR							
	TW 593642	В	20040621	TW 2001-90131392	20011218				
	JP 4173735	B2		JP 2002-552092	20011218				
	US 20030064322	A1	20030403	US 2002-220035	20020827				
PRAI	JP 2000-385772	Ą	20001219						
	JP 2001-287233		20010920						
0.0	WO 2001-JP11107	B	20011218						
.0S	MARPAT 137:70549								

MARRAT 137:70549
A light absorbing agent comprises a first polymethine coloring matter having a monomethine chain or a polymethine chain within the mol. thereof and an organic metal complex anion as a gegen ion, a second polymethine coloring matter having a monomethine chain or a polymethine chain within the mol. thereof and an anion other than an organic metal complex anion as gegen ion, and a formaxan metal complex. An optical recording medium using the light absorbing agent and a method for preparing the optical recording medium. The cording medium are also claimed. The light absorbing agent exhibits excellent elec. characteristics when used in an organic optical recording medium.

THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

| Albert | A

TI IN PA	Noguchi, Ayashi Pioneer Electronic	nedium ; Saka	i, Tatsuro;	008 ACS on STN Matsui, Fumio; Okazaki,	Tsuneki;
SO	Ger. Offen., 7 pp. CODEN: GWXXBX				
DT	Patent				
LA	German CNT 1				
PAIN.	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PΙ	DE 4027173	A1	19910704		19900828
	JP 03203692	A	19910905		19891229
PRAT	US 5155009 TP 1989-341641	A A	19921013 19891229	US 1990-570443	19900821
OS GI	MARPAT 116:140205	.,	10001220		

AB The material comprises a recording layer containing a cyanine dye I [R1, R2 = C3-6 alkyl] and a quenching agent II [R3-R6 = H, substituent. The material has high productivity and improved recording/reproduction properties.

L23 ANSWER 17 OF 19 CAPLUS COPYRIGHT 2008 ACS on SIN AN 2001:455176 CAPLUS DN 135:6564 CAPLUS DN 135:6564 Chiaki, Aizawa, Yasushi, Kawata, Toshio; Yasui, Shigeo PA Kabushiki Kaisha Hayashibara Seibutsu Kagaku Kenkyujo, Japan ODEN: PIXXD2 DT Jath. Appl., 53 pp. CODEN: PIXXD2 DT Patent LA Japanese FAN.ON 1 PARN.ON 1																			
	PA'	TENT	NO.			KIN		DATE			API	LICAT	NOI	NO.		D.	ATE		
ΡI	WO	2001	0443	74		A1		2001	0621		80	2000-	-JP82	97		2	0001	124	
		Ψ:	JP,	KR,		CV	DE	Dir	DC.	ET	171	R. GB.	cn.	TE	TT	T 11	мс	NIT	
		IVW -		SE,	TR	UI,	DE,	DIV,	Eo,	ΓI,	rı	, UD,	GN,	IL,	11,	LU,	MU,	INL,	
	EP	1178										2000-							
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	US	7402	375			B2		2008	0722										
PRAI	JP	1999	358	949		A		1999	1217										
	EP	2000	)-977	918		A3		2000	1124										
	WO	2000	)-JP8	297 730		ā.		2000	1124										
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RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT																			

$$\begin{array}{c} \text{NC} \\ \text{NC} \\ \text{C} \\ \text{NC} \\ \text{C} \\ \text{C} \\ \text{NC} \\ \text{C} \\ \text{C} \\ \text{C} \\ \text{NC} \\ \text$$

AB TCNQ derivs. I (R = C>10 alkyl) were prepared for use in elec. conductivity Langmuir-Blodgett monopol. films. Thus, Birch reduction of 2.5-[Me0)2cfBis(CR)21Me, followed by hydrolysis, gave dodecylcyclohexanedione II. which was condensed with H2C(CN)2 to give bis (dicyanomethylene)cyclohexane III. III was brominated and dehydrobrominated in situ with pyridine to give I [R = (CH2)1Me] (IV). I [R = (CH2)14Me, CR2)17Me] were prepared from the corresponding hydroquinones via aromatic hydrogenation, chlorochromate oxidation, etc. A solution of IV in GHCI3 (10-4M), alone or in solution with arachidic acid, was dropped onto aqueous CdCl2-KHCO3 at pH 5.5 to give a good monomol. film.

=> d 123 11 all

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ANSWER 11 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN 2005:979709 CAPLUS 143:268230 Entered STN: 08 Sep 2005 Short visible light absorbing cyanine dyes with good light resistance and solubility Alzawa, Yasushi; Koyama, Yoshinori; Noguchi, Avashi
 L23
AN
DN
ED
TI
   IN
                            Aizawa, Yasushi; Koyama, Yoshinori; Noguchi,
Ayashi Kabushiki Kaisha Hayashibara Seibutsu Kagaku Kenkyujo, Japan
PCT Int. Appl., 25 pp.
CODEN: PIXXD2
Patent
Japanese
IOM COS9609-02
ICS COS9602-00; COS96045-14; COS96045-20
41-8 Oyes, Organic Pigments, Fluorescent Brighteners, and Photographic
Sensitizers)
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FAN. CNT 1
PATENT NO.
                                                                                                                                                 KIND DATE
                                                                                                                                                                                                                                                             APPLICATION NO.
                         EP 1734085
R: DE, GB
CN 1934198
KR 2007015132
IN 2006CN03552
US 2008000004
PRAI JP 2004-53528
JP 2004-735635
JP 2004-73655
WO 2005-JP2978
CLASS
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20070201
20070622
20080103
20040227
20040308
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KR 2006-717173
IN 2006-CN3552
US 2007-590895
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PATENT NO.
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          W0 2005083011
                                                                                                   ICM
          EP 1734085
                                                                                                   IPCR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (6) Kabushiki Kaisha Hayashibara Seibutsu Kagaku Kenkyujo; EP 1347030 A1 2002
CAPLUS
                                                                                                   BCLA
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CO9BO045-00 [[,c\*]

NCL OS/655.000

MARPAT 143:268590

Title cyanine dyes have a specific structure and exhibit the primary local maximum of absorption in the region of a wavelength ≥400 rm in the state of a solution Thus, 2 g = -[(1,3-dihydro-1,3,3-trimethyl-2H-2-ylidene)methyl-1,3,3-trimethyl-3H-indolium perchlorate and 3.5 g triethyl ammonium bis[l-butyl-1,2-dihydro-6-(hydroxy-40)-5-[[2-(hydroxy-40)-5-introphenyl]azo-4Ni]-4-methyl-2-vox-3-p-yridinecarbonitrilato(2-)]-cobaltate were refluxed for 20 min in 20 mL acetonitrile, removed solvent, ethanol was added therein and refluxed for 30 min to give a cyanine dye with absorption maximum 447 rm, good solubility in various solvents, decomposition temperature 245°, and good light resistance. short visible absorbing cyanine dye light resistance soly; dihydrotrienthylylidenemethyl trienthylidolium perchlorate reactant; triethylammonium bisbutyl dihydroxynitrophenylazomethyloxopyridinecarbonitr ilato cobaltate reactant Unsaturated compounds

K. JMC (Industrial manufacture): TBM (Technical or engineered material uso): FREF (Preparation): USBS (Uses)

Ocyanines: short visible light absorbing cyanine dyes with good light resistance and solubility)

Dyes (cyanines, smort visible light absorbing cyanine dyes with good light resistance and solubility)

IT Dyes
(short visible light absorbing cyanine dyes with good light resistance and solubility)

IT 330442-50-7F RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); FREF (Preparation); ISBS (Uses)
(short visible light absorbing cyanine dyes with good light resistance and solubility)

IT 103988-41-0 419581-80-9 863962-11-2
RL: RCT (Recatant); RMCT (Recatant or reagent)
(short visible light absorbing cyanine dyes with good light resistance and solubility)

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD RE
(1) Kabushiki Kaisha Hayashibara Seibutsu Kagaku Kenkyujo; W0 0144374 Al 2001 CAPLUS (2) Kabushiki Kaisha Hayashibara Seibutsu Kagaku Kenkyujo; EP 1178083 A1 2001 CAPLUS (3) Kabushiki Kaisha Hayashibara Seibutsu Kagaku Kenkyujo; EP 1429324 Al 2001 CAPLUS

(4) Kabushiki Kaisha Hayashibara Seibutsu Kagaku Kenkyujo; US 2003181727 A1 2001 CAPLUS (5) Ka shiki Kaisha Hayashibara Seibutsu Kagaku Kenkyujo; WO 0250210 Al 2002 CAPLUS

(7) Kabushiki Kaisha Hayashibara Seibutsu Kagaku Kenkyujo; US 200364322 Al 2002

L23 ANSWER 11 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN (Continued) (8) Tdk Corp; US 6168845 B1 1998 (9) Tdk Corp; B 887202 A1 1998 CAPLUS (10) Tdk Corp; W0 9829257 A1 1998 CAPLUS

=> sel 123 11 rn E1 THROUGH E4 ASSIGNED

=> fil reg FILE 'REGISTRY' ENTERED AT 14:58:09 ON 16 DEC 2008 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2008 American Chemical Society (ACS)

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STRUCTURE FILE UPDATES: 15 DEC 2008 HIGHEST RN 1084993-68-9 DICTIONARY FILE UPDATES: 15 DEC 2008 HIGHEST RN 1084993-68-9

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TSCA INFORMATION NOW CURRENT THROUGH July 5, 2008.

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REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

= > < e1-e4

L24 ANSWER 1 OF 4 REGISTRY COPYRIGHT 2008 ACS on STN
RN 863962-11-2 REGISTRY
ED Entered STN: 26 Sep 2005
CN HH-Benz[e]indolium, 2-[(1,3-dihydro-1,1,3-trimethyl-2H-benz[e]indol-2-ylidene/methyl]-1,1,3-trimethyl-perchlorate (1:1) (CA INDEX NAME)
CN HH-Benz[e]indolium, 2-[(1,3-dihydro-1,1,3-trimethyl-2H-benz[e]indol-2-ylidene/methyl]-1,1,3-trimethyl-, perchlorate (9CI)
MF C31 ESI NZ . Cl 04
CS TN Files: CA, CAPLUS, USPATFULL

CM 1

CRN 157075-00-8 CMF C31 H31 N2

2

CRN 14797-73-0 CMF C1 04

1 REFERENCES IN FILE CA (1907 TO DATE) 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 143:268290

L24 ANSWER 2 OF 4 REGISTRY COPYRIGHT 2008 ACS on STN (Continued) REFERENCE 2: 149:334046 REFERENCE 3: 148:21184 REFERENCE 4: 146:510490

REFERENCE 5: 145:507110 REFERENCE 6: 144:275709 REFERENCE 7: 143:396410 REFERENCE 8: 143:396409

REFERENCE 9: 143:268290 REFERENCE 10: 139:330072

L24 ANSWER 2 OF 4 REGISTRY COPYRIGHT 2008 ACS on STN

RN 419S81-80-9 REGISTRY
ED Entered STN: 21 May 2002
Cobaltate(1-), bis[|-buty|-1, 2, 5, 6-tetrahydro-5-[2-[2-(hydroxy-k0)-5-nitroheny|1]diazeny|-kNl]-4-methy|-2-oxo-6-(oxo-k0)-3-pyridinecarbonitrilato(2-)]-, hydrogen, compd. with N,N-diethylethanamine
(1:1:1) Ca NDEX NAME)

OTHER CA INDEX NAMES

CN Cobaltate(1-), bis[|-buty|-1, 2, 5, 6-tetrahydro-5-[[2-(hydroxy-k0)-5-nitroheny|]azo-knyl]-4-methyl-2-oxo-6-(oxo-k0)-3-pyridinecarbonitrilato(2-)]-, hydrogen, compd. with N,N-diethylethanamine
(1:1) (GC)

DR 356062-82-3

MF C34 H30 Co NIO 010 . C6 H15 N . H

CS TN Files: CA, CAPLUS, USPAT2, USPATFULL

CRN 419581-79-6 (330442-50-7) CMF C34 H30 Co N10 010 . H CCI CCS

CM 2

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12 REFERENCES IN FILE CA (1907 TO DATE) 13 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 149:473007

L24 RN ED CN

ANSWER 3 OF 4 REGISTRY COPYRIGHT 2008 ACS on STN 350442-50-7 REGISTRY COPYRIGHT 2008 ACS on STN 350442-50-7 REGISTRY COPOLING TO THE CONTROL OF THE CONTROL

6 REFERENCES IN FILE CA (1907 TO DATE) 6 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 148:101980

REFERENCE 2: 147:450314

REFERENCE 3: 145:429506

REFERENCE 4: 144:255679

REFERENCE 5: 144:193780

REFERENCE 6: 143:268290

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L24 ANSWER 4 OF 4 REGISTRY COPYRIGHT 2008 ACS on STN

RN 10399-41-0 REGISTRY 1986

CD Entered STN: 30 Aug 1986

CN 3H-Indolium, 2-[(0,-3-dihydro-1,3,3-trimethy1-2H-indol-2-ylidene)methy1]-
1,3,3-trimethy1-, perchlorate (1:1) (CA INDEX NAME)

CN 3H-Indolium, 2-[(1,3-dihydro-1,3,3-trimethy1-2H-indol-2-ylidene)methy1]-
1,3,3-trimethy1-, perchlorate (9CI)

CTHER NAMES:

CN NK 3212

MF C23 H27 N2 C1 04

CM 1

CRN 61575-70-0

CMF C23 H27 N2
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CM 2

CRN 14797-73-0 CMF C1 04

21 REFERENCES IN FILE CA (1907 TO DATE) 21 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 149:366321
REFERENCE 2: 148:366632
REFERENCE 3: 148:366631
REFERENCE 4: 145:219801
REFERENCE 5: 145:178784
REFERENCE 6: 143:396410
REFERENCE 7: 143:396409
REFERENCE 8: 143:348676

L24 ANSWER 4 OF 4 REGISTRY COPYRIGHT 2008 ACS on STN (Continued

REFERENCE 9: 143:268290 REFERENCE 10: 142:472665

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(FILE 'HOME' ENTERED AT 14:34:37 ON 16 DEC 2008)

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FILE 'REGISTRY' ENTERED AT 14:34:59 ON 16 DEC 2008
                STRUCTURE UPLOADED
L1
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L2
              O SEA SSS SAM L1 AND L2
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              O SEA SSS FUL L1 AND L2
              7 SEA SSS SAM L1
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            214 SEA SSS FUL L1
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              2 SEA SSS SAM L2
                D SCAN
L8
             81 SEA SSS FUL L2
L*** DEL
              0 S L6 AND L7
              O SEA ABB=ON PLU=ON L6 AND L8
L9
     FILE 'CAPLUS' ENTERED AT 14:42:19 ON 16 DEC 2008
L10
            112 SEA ABB=ON PLU=ON L6
              5 SEA ABB=ON PLU=ON L8
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L12
              O SEA ABB=ON PLU=ON L10 AND L11
                D L11 1-5 BIB ABS HITSTR
     FILE 'REGISTRY' ENTERED AT 14:46:10 ON 16 DEC 2008
                D L1
                D L2
     FILE 'CAPLUS' ENTERED AT 14:47:08 ON 16 DEC 2008
                D QUE L12 STAT
                D L11 1-5 IDE CAN
     FILE 'HOME' ENTERED AT 14:47:54 ON 16 DEC 2008
     FILE 'REGISTRY' ENTERED AT 14:49:30 ON 16 DEC 2008
L13
                STRUCTURE UPLOADED
L14
              1 SEA SSS SAM L13
                D SCAN
             25 SEA SSS FUL L13
L15
                D QUE L15 STAT
             13 SEA ABB=ON PLU=ON L15 AND CAPLUS/LC
L16
L17
             12 SEA ABB=ON PLU=ON L15 NOT L16
                D 1-12 IDE CAN
     FILE 'CAPLUS' ENTERED AT 14:52:32 ON 16 DEC 2008
L18
              3 SEA ABB=ON PLU=ON L15
                D 1-3 BIB ABS HITSTR
                E AIZAWA YASUSHI/AU
             30 SEA ABB=ON PLU=ON "AIZAWA YASUSHI"/AU
L19
             E KOYAMA YOSHINORI/AU
84 SEA ABB=ON PLU=ON "KOYAMA YOSHINORI"/AU
L20
                E NOGUCHI AYASHI/AU
                                    "NOGUCHI AYASHI"/AU
L21
             16 SEA ABB=ON PLU=ON
L22
            122 SEA ABB=ON PLU=ON
                                    L19 OR L20 OR L21
             19 SEA ABB=ON PLU=ON L22 AND CYANINE
L23
                D QUE L23 STAT
                D 1-19 BIB ABS
                D L23 11 ALL
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FILE 'REGISTRY' ENTERED AT 14:58:09 ON 16 DEC 2008

L24

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FILE HOME

FILE REGISTRY

Property values tagged with IC are from the  ${\tt ZIC/VINITI}$  data file provided by InfoChem.

STRUCTURE FILE UPDATES: 15 DEC 2008 HIGHEST RN 1084993-68-9 DICTIONARY FILE UPDATES: 15 DEC 2008 HIGHEST RN 1084993-68-9

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http://www.cas.org/support/stngen/stndoc/properties.html

FILE CAPLUS

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FILE COVERS 1907 - 16 Dec 2008 VOL 149 ISS 25 FILE LAST UPDATED: 15 Dec 2008 (20081215/ED)

Caplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

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http://www.cas.org/legal/infopolicy.html

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Structure attributes must be viewed using STN Express query preparation. L6  $\,$  214 SEA FILE=REGISTRY SSS FUL L1  $\,$ L25 STR

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ANSWER 1 0F 14 REGISTRY COPYRIGHT 2008 ACS on STN 1052689-87-8 REGISTRY Entered STN: 25 Sep 2008 SH-Fyrrolo(2,3-b)pyridinium, 2-[[1,3-dihydro-1,3-dimethyl-3-(phenylmethyl)-1,3-f,5-f-terlaryhdro-f-[2-[2-(hydroxy-k0)-5-nitrophenyl]diazenyl-nNl]-4-methyl-2-0xo-f-(oxo-k0)-3-pyridinezarbonitrilato(2-)]cobaltate(1-) (1:1) (CA INDEX NAME) C34 H30 C0 NlO 010 . C28 H30 NS CA Files: CA, CAPLUS CM 1 CRN 1052689-84-5 CMF C28 H30 N3

CM 2

330442-50-7 C34 H30 Co N10 010 CCS

1 REFERENCES IN FILE CA (1907 TO DATE) 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 149:334046

ANSWER 3 0F 14 REGISTRY COPYRIGHT 2008 ACS on STN 952062-01-0 REGISTRY Entered STN: 30 0ct 2007 SM-Indoinum, 2-[[5-chloro-1,3-dihydro-1-methyl-3,3-bis(phenylmethyl)-2H-indoi-2-yiidehelmethyl]-1,3,3-trimethyl-5-nitro-nis[-bis[1-bityl-1,2,5,6-tetahydro-5-[2-[2-(hydroxy-KO)-5-nitrophenyl]diazenyl-mNl]-4-methyl-2-oxo-6-(oxo-KO)-3-pyridinecarbonitrilatc(2-)]cobaltate(1-) (1:1) (CA INDEX NAME) CSS HSS C1 NS 02 . C34 HSO Co N10 010

CA STN Files: CA, CAPLUS

CM 1

CRN 952062-00-9 CMF C35 H33 C1 N3 02

CM 2

330442-50-7 C34 H30 Co N10 010 CCS

1 REFERENCES IN FILE CA (1907 TO DATE) 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 147:450314

ANSWER 2 0F 14 REGISTRY COPYRIGHT 2008 ACS on STN 1052689-86-7 REGISTRY Entered SIN: 25 Sep 2008
3H-Pyrrolo[2,3-6]pyridinium, 2-[(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene|methyl]-1,3,3-trimethyl]-, bis[1-butyl-1,2,5,6-tetrahydro-6-[2-[2-(hydroxy-00)-6-nitrophenyl]diazenyl-mNl]-4-methyl-2-oxo-6-(oxo-00)-3-pyridinecarbonitrilato(2-)|cobaltate(1-) (1:1) (CA INDEX NAME)
C34 H30 Co N10 010 . C22 H26 N3
CA SIN Files: CA, CAPLUS

CM 1

CRN 1052689-82-3 CMF C22 H26 N3

330442-50-7 C34 H30 Co N10 010 CCS

1 REFERENCES IN FILE CA (1907 TO DATE) 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 149:334046

ANSWER 4 0P 14 REGISTRY COPYRIGHT 2008 ACS on STN 95061-99-3 REGISTRY ENTER OF STRING AND STRING AN

CM 1

CRN 952061-98-2 CMF C25 H29 N2

CM 2

330442-50-7 C34 H30 Co N10 010 CCS

1 REFERENCES IN FILE CA (1907 TO DATE) 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 147:450314

ANSWER 5 0F 14 REGISTRY COPYRIGHT 2008 ACS on STN 915131-83-8 REGISTRY COPYRIGHT 2008 ACS on STN 915131-83-8 REGISTRY 1 bec 2006 SM-Indolum, 2-[[1,3-dihydro-1,3-dimethyl-3-(phenylmethyl)-2H-indol-2-ylidene]methyl]-1,3,3-trimethyl-, bis[1-butyl-1,2,5,6-tetrahydro-5-[[2-flydroxy-40)-5-nitrophenyl]azo-NNJ-4-methyl-2-oxo-6-(oxo-60)-3-pyridinecarbonitrilato(2-)]cobaltate(1-) (9CI) (CA INDEX NAME) C34 ISO C0 N10 010 . C29 HS1 N2 CA STN Files: CA, CAPLUS

CM 1

CRN 915131-81-6 CMF C29 H31 N2

CM 2

330442-50-7 C34 H30 Co N10 010 CCS

1 REFERENCES IN FILE CA (1907 TO DATE) 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 145:507110

L28 ANSWER 6 OF 14 REGISTRY COPYRIGHT 2008 ACS on STN (Continued)

ANSWER 6 0F 14 REGISTRY COPYRIGHT 2008 ACS on STN
915131-76-9 REGISTRY
Entered STN: 1 Dec 2006
3M:Indolium, 1 Techyl-2-[[1-ethyl-1, 3-dihydro-3-methyl-3-(phenylmethyl)-2H-indol-2-ylidene|methyl]-3-methyl-3-(phenylmethyl)-;
hig[1-butyl-1, 2, 5, 6-tetrahydro-5-[[2-(hydroxy-40)-5-nitrophenyl]azo-4NI]-4-methyl-2-oxo-6-(oxo-40)-3-pyridinecarbonitrilato(2-)
STN Files: CA, CAPLUS CM 1 CRN 915131-74-7 CMF C37 H39 N2

CM 2

CRN 330442-50-7 CMF C34 H30 Co N10 010 CCI CCS

1 REFERENCES IN FILE CA (1907 TO DATE) 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 145:507110

ANSWER 7 OF 14 REGISTRY COPYRIGHT 2008 ACS on STN 866757-39-0 REGISTRY COPYRIGHT 2008 ACS on STN 866757-39-0 REGISTRY 2005 Entered STN: 04 Nov 2005 Entered STN: 04 Entered STN: 05 Entered STN: 04 Entered STN: 04 Entered STN: 05 Entered STN: 05

CM 1

CRN 866757-38-2 CMF C28 H30 C1 N2

CM 2

330442-50-7 C34 H30 Co N10 010 CCS

2 REFERENCES IN FILE CA (1907 TO DATE) 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 143:396410 REFERENCE 2: 143:396409

L28 ANSWER 8 OF 14 REGISTRY COPYRIGHT 2008 ACS on STN (Continued)

ANSWER 8 OF 14 REDISTRY COPYRIGHT 2008 ACS on STN 866757-37-1 REDISTRY Entered STN: O4 Nov 2005 Entered STN: O4 Nov 2005 HI-Benz [e] indol 1um, 2-[(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)methyl]-3-e-thyl-1,1-dimethyl-,1-5,5,6-tettaphydro-5-[[2-(hydroxy-KO)-5-nitrophenyl]azo-KNI]-4-methyl-2-oxo-6-(oxo-KO)-3-pyridimecarbonitrilato(2-))cobaltate(1-) (SCI) CA INDEX NAME) C34 E30 Co NIO 010 . C28 H31 N2 CA STN Files: CA, CAPLUS, USPATFULL

CM 1

CRN 866757-36-0 CMF C28 H31 N2

330442-50-7 C34 H30 Co N10 010 CCS

2 REFERENCES IN FILE CA (1907 TO DATE) 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 143:396410 REFERENCE 2: 143:396409

ANSWER 9 0F 14 REGISTRY COPYRIGHT 2008 ACS on STN 866757-35-9 REGISTRY COPYRIGHT 2008 ACS on STN 866757-35-9 REGISTRY 2005 Entered SIN: 04 Nov 2005 Hi-Benz [g] indoilum, 2-[(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)methyl]-1,3,3-trimethyl-, bis[1-butyl-1,2,5,6-tetrahydro-5-[[2-(hydroxy-90)-5-nitrophenyl]azo-Nall-4-methyl-2-oxo-6-(bx-0)-3-pyridinecarbonitrilato(2-)]cobaltate(1-) (9CI) (CA INDEX NAME) C34 H30 Co N10 010 . C27 H29 N2 CA SIN Files: CA, CAPLUS, USPATFULL

CM 1

CRN 866757-34-8 CMF C27 H29 N2

CM 2

330442-50-7 C34 H30 Co N10 010 CCS

2 REFERENCES IN FILE CA (1907 TO DATE) 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 143:396410 REFERENCE 2: 143:396409

ANSWER 10 OF 14 REGISTRY COPYRIGHT 2008 ACS on STN 866757-33-7 REGISTRY Entered STN: 04 Nov 2005 [H-Benz[e] indolium, 2-[(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)methyl]-1,1,3-trimethyl-, bis[1-butyl-1,2,5,6-tetrahydro-5-[[2-(hydroxy-%0)-5-nitrophenyl] azo-%1]/4-methyl-2-oxo-6-(oxo-60)-3-pyridinecarbonitrilato(2-)]cobaltate(1-) (9CI) (CA INDEX NAME) C34 H30 Co N10 010 . C27 H29 N2 CA STN Files: CA, CAPLUS, USPATFULL

CM 1

CRN 866757-32-6 CMF C27 H29 N2

CM 2

330442-50-7 C34 H30 Co N10 010 CCS

2 REFERENCES IN FILE CA (1907 TO DATE) 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 143:396410 REFERENCE 2: 143:396409

ANSWER 11 OF 14 REGISTRY COPYRIGHT 2008 ACS on STN 866767-31-5 REGISTRY Entered STN: 04 Nov 2005 3H-Indolium, 2-[[1,3-dihydro-3,3-dimethyl-1-[2,2,2-trifluoro-1-(trifluoromethyl) ethyl]-3; 3-dimethyl-1-[2,2,2-trifluoro-1-(trifluoromethyl)] ethyl]-1; 2,5,6-tridhydro-5-[[2-(hydroxy-x0)-5-nitrophenyl]] azo-NN]-4-methyl-2-oxo-6-(oxo-w0)-3-pyridimecarbonitrilato(2-NN])-4-methyl-2-oxo-6-(oxo-w0)-3-pyridimecarbonitrilato(2-SIN) C34 H30 C0 N10 010 . C27 H23 F12 N2 CA STN Files: CA, CAPLUS, USPATFULL

CM 1

CRN 866757-30-4 CMF C27 H23 F12 N2

CM 2

330442-50-7 C34 H30 Co N10 010 CCS

2 REFERENCES IN FILE CA (1907 TO DATE) 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

ANSWER 12 OF 14 REGISTRY COPYRIGHT 2008 ACS on STN 866757-29-1 REGISTRY Entered STN: 04 Nov 2005 Entered STN: 04 Nov 2005 SH-Indollum, 1-ethyl-2-[(1-ethyl-3, 3-dimethyl-2H-indol-2-ylidene)methyl]-3, 3-dimethyl, bis[1-butyl-1, 2, 5, 6-tettahydro-5-[[2-(hydroxy-KO)-5-nitrohenyl]azo-KN]-4-methyl-2-0xo-6-(oxo-KO)-3-pyridinecarbonitrilato(2-)]cobaltate(1-) (9CI) (CA INDEX NAME) C34 E80 Co N10 010 . C25 E81 N2 CA STN Files: CA, CAPLUS, USPATFULL

CM 1

CRN 802280-18-8 CMF C25 H31 N2

CM 2

330442-50-7 C34 H30 Co N10 010 CCS

2 REFERENCES IN FILE CA (1907 TO DATE) 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 143:396410 REFERENCE 2: 143:396409 L28 ANSWER 11 OF 14 REGISTRY COPYRIGHT 2008 ACS on STN

REFERENCE 1: 143:396410 REFERENCE 2: 143:396409

ANSWER 13 0F 14 REGISTRY COPYRIGHT 2008 ACS on STN 866757-28-0 REGISTRY Entered STN: 04 Nov 2005 3H-Indolium, 2-[(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)methyl]-1-ethyl-3, 3-dimethyl-, 8is[1-butyl-1],2,5,6-tetrahydro-5-[[2-(hydroxy-v0)-5-nitrophenyl]azo-wNl]-4-methyl-2-oxo-6-(oxo-wO)-3-pyridinecarbonitrilato(2-)]cobaltate(1-) (9CI) (CA INDEX NAME) C34 H30 Co N10 010 . C24 H29 N2 CA STN Files: CA, CAPLUS, USPATFULL

CM 1

CRN 866757-27-9 CMF C24 H29 N2

CM 2

330442-50-7 C34 H30 Co N10 010 CCS

2 REFERENCES IN FILE CA (1907 TO DATE) 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 143:396410 REFERENCE 2: 143:396409

CRN 61575-70-0 CMF C23 H27 N2

5 REFERENCES IN FILE CA (1907 TO DATE)

L28 ANSWER 14 OF 14 REGISTRY COPYRIGHT 2008 ACS on STN 5 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 148:42448

 REFERENCE
 2:
 148:21184

 REFERENCE
 3:
 147:82800

 REFERENCE
 4:
 143:396410

 REFERENCE
 5:
 143:396409

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FILE COVERS 1907 - 16 Dec 2008 VOL 149 ISS 25 FILE LAST UPDATED: 15 Dec 2008 (20081215/ED)

Caplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

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http://www.cas.org/legal/infopolicy.html '.FIONA' IS DEFAULT FORMAT FOR 'CAPLUS' FILE

=> s 128 L30 8 L28

=> d 1-8 bib abs hitstr

ANSWER 1 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2008:1073590 CAPLUS
DN 149:334046
TI Cyanine dyes for blue laser optical recording media
IN Shoda, Hisashi; Uchida, Naoyuki; Furomoto, Shigeyuki; Aizawa, Yasushi; Dan-Oh, Yasufumi; Toki, Masshiko
PA Mitsubishi Kagaku Media Co., Ltd., Japan; Kabushiki Kaisha Hayashibara Seibutsu Kagaku Menkyujo
SO PCT Int. Appl., 55pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.ON: 1
PATENT NO. KIND DATE APPLICATION NO DATE PATENT NO KIND DATE APPLICATION NO. WO 2008105238 A1

AL, CN, GD, KN, MK, RO, TT, BG, IT, BJ, GH, BY, AM, CO, GE, KP, MN, RS, TZ, CH, LT, GM, KG, A

The present invention relates to cyanine dyes (I), wherein A1, B1 = independently (um)substituted aromatic ring (at least one aromatic ring of A1 and B1 contains a nitrogen atom); R1, R2 = independently substituent (R1 and/or R2 may be bonded with another cation); X1, R2, X3, X4 = independently organic group (X1 and X2 and/or X3 and X4 may combine together to form a ring structure); Y1 = H or organic group; and Z = anion. Thus, 3.7 g 2, 3-dihydro-1, 3, 3-trimethyl-2-methyl-18-priolo[2, 3-blpyridine and 5.8 g 2-C[nydroxymimo) methyl-1], 3, 3-trimethyl-3B-indolium perchlorate were heated at 90° for 1 h to give a cyanine compound with decomposition point 255°, Amax 424.5 nm, and absorption coefficient 3.74 + 105 at 424.5 nm, and absorption coefficient 3.74 + 105 at 424.5 nm and absorption coefficient 3.74 (Industrial manufacture); TBM (Technical or engineered material use); PREP (Treparation); INSE (Uses) (preparation of cyanine dyes for blue laser optical recording media) 1052689-86-7 (APLUS

L30 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

2 CM

330442-50-7 C34 H30 Co N10 010 CCS

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT RE. CNT 2

ANSWER 1 0F 8 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
3H-Pyrrolo[2,3-b]pyridinium, 2-[(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)methyl]-1,3,3-trimethyl-2H-indol-2-ylidene)methyl]-1,3,3-trimethyl-2-finethyl-2-f

CM

CM 2

330442-50-7 C34 H30 Co N10 010 CCS

1052689-87-8 CAPLIS
3H-Pyrrolo[2,3-b]pyridinium, 2-[[1,3-dihydro-1,3-dimethyl-3-(phenylmethyl)-bis[1-butyl-1,2,5,6-tetrahydro-5-[2-[-(x-dwiroxy-w0)-5-nitrophenyl]diazenyl-sNi]-4-methyl-2-oxo-6-(oxo-w0)-3-pyridinecarbonitrilato(2-)]cobaltate(1-) (1:1) (CA INDEX NAME)

CM 1

CRN 1052689-84-5 CMF C28 H30 N3

```
L30
AN
DN
TI
         ANSWER 2 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN 2007:1395888 CAPLUS 148:42448
          Optical disk, information recording method, and information reproducing
TI Optical disk, information recording method, and information reproduce method
IN Umezawa, Kazuyo; Morita, Seiji; Takazawa, Koji; Ando, Hideo; Ootera,
Yasuski; Nakamura, Naomasa; Morishita, Naoki
PA Kabushiki Kaisha Toshiba, Japan
SO Eur. Pat. Appl., 59pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT | RATENT NO. KIND DATE APPLICATION NO. DATE
        IT
```

CM 1

CRN 330442-50-7 CMF C34 H30 Co N10 010 CCI CCS

L30 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN (Continued

CM 2

CRN 61575-70-0 CMF C23 H27 N2

L30 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

CM 2

CRN 61575-70-0 CMF C23 H27 N2

ANSWER 3 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2007:1395692 CAPLUS
DN 148:21184
T1 Optical disk, information recording method, information reproducing method, and disk drive
N Yoshida, Nobubinsa: Otera, Yasuaki; Umezawa, Kazuyo; Nakamura, Naomasa; Takazawa, Koji; Ando, Hideo
Nabushiki Kaisha Toshiba, Japan
SD Eur. Pat. Appl., 26pp.
CODEN: EPXENW
DT Patent
LA English
FAN.CN: 1
PATENT NO. KIND DATE APPLICATION NO. DATE
PI EP 1863025 A2 20071205 EP 2007-109205 20070530
EF 1863025 A3 20080730
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, III, LL, IL, UL, V, Wo, MT, NL, PL, PT, RO, SE, SI, SK, TR, JP 2007037373 A 20071205 US 2007-758201 20070531
US 20070320005 A1 20071205 US 2007-758201 20070501
EPX AVI PLANTA AND A 20060602
BA A virte-once orbical disk which uses a short-wavelength laser (wavelength along wavelength laser (wavelength falling within a range from 600 nm to 800 nm). To this end, a groove is cut in advance on a BCA part on a molded substrate of the optical disk to information recording even using a vavelength laser (wavelength falling within a range from 600 nm to 800 nm). To this end, a groove is cut in advance on a BCA part on a molded substrate of the optical disk to store a dye. In this way, the sensitivity of the dye in the ECA increases, to allow a laser having a wavelength (a groove is cut in advance on a BCA part on a molded substrate of the optical disk to store a dye. In this way, the sensitivity of the dye in the ECA increases, to allow a laser having a wavelength (a gr., 405 nm) corresponding to information recording of the dye to record a barcode pattern on the BCA.

RI: TBM (Technical or engineered material use): USES (Uses) (optical disk, information recording method, information reproducing method, and disk drive)

SM Hondolium, 2-[(1,3-dihydro-1,3,3-trimethyl-2-di-indol-2-ylidene)methyl-1,1,3,3-trimethyl-1, bis[l-butyl-1,2,5,6-tetrahydro-5-[2-[2-(hydroxy-50)-5-nitrophenyl]diazenyl-\*NIJ-4-methyl-2-yco-6-(600-500-50)-3-pyridinecarbonitrilato(2-)]cobaltate(1-)

R12 R7
A1 N PAn?-

CRN 330442-50-7 CMF C34 H30 Co N10 010 CCI CCS

AB A cyanine compound(I): wherein the ring Al represents a benzene ring or a naphthalene ring; the ring AS represents a 5- or 6-membered ring; Rl and R2 independently represent a H atom or the like; R7 represents an alkyl group or the like; R12 represents a substituent represented by the general formula II or III; R20 represents a H atom or the like; Ang-represents an anion having a valency number of Q1 expersents lor 2; and p represents a factor for maintaining the charge neutral. In II, the bond between L and T is a double bond, a conjugated double bond or a triple bond; L represents a C atom; T represents a C atom, an O atom, a S atom, or a N atom; x, y and z independently represent O or 1; s represents a mumber ranging from O to 4; R13 represents a H atom or the like; and R14, R15 and R16 independently represent to a like; in III, the bond between L and T is a double bond or a conjugated double bond; L'

L30 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
represents a C atom; T' represents a C atom, an O atom or a N atom; s'
represents a no. ranging from 0 to 4; and the ring contp. L' and T' is a
5-membered ring which may have a heteroatom, or the like. Thus, a Co
coordination anion salt of indole compd. I' was prepd., dissolved in a
solvent and spin coated on a T-50 covered polycarbonate substrate and gave
an optical imaging layer that showed high UV resistance.

IT 962061-99-37 962062-01-0P
RL: IMF (Industrial manufacture): FRP (Properties): TBM (Technical or
engineered material use): PREP (Preparation): IUSES (Uses)
(preparation of cyanine compound and its salts for optical recording material)
RN 962061-99-3 CAPLUS
ON 3H-Indolium, 2-[I], 3-dihydro-1, 3-dimethyl-3-(2-propen-l-yl)-2H-indol-2ylidenelmethyl]-1, 3, 3-trimethyl-, bis[1-butyl-1, 2, 5, 6-tetrahydro-5-[2-[2(hydroxy-K0)-5-nitrophenyl]diazenyl-xNl]-4-methyl-2-cxo-6-(cxoKN)-3-pyridinecarbonitrilato(2-)]cobaltate(1-) (1:1) (CA INDEX

ON 1

CM 1

CRN 952061-98-2 CMF C25 H29 N2

CM 2

330442-50-7 C34 H30 Co N10 010 CCS

L30 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:668358 CAPLUS
DN 147:82800
IN 147:828

PATENT NO. KIND DATE APPLICATION NO. DATE

PATENT NO. KIND DATE APPLICATION NO. DATE

PRAIL JP 2007152825 A 20070621 JP 2005-353204 20051207

PRAIL JP 2006-353204 20051207

AB In the manufacture, concentrically or spirally grooved substrates are spin-coated with organic dve solns. through nozzles while rotating the substrates and smoothly moving the nozzles from inner to outer circumferences at average rate 5-18 mm/s. Dischariging of the solns. from the nozzles is stopped at a nosition Ratop satisfying 30.0 mm < Ratop < (Roits + 1.0) mm (Ridis + radius of the disks 240 mm) (Ratop < (Roits + 1.0) mm (Ridis + radius of the disks 240 mm) (Ratop < (Roits + 1.0) mm at 650-250 mm) (Roits + radius of the disks 240 mm) (Ratop < (Roits + 1.0) mm at 650-250 mm) (Roits + Roits + Roi

CM 1

330442-50-7 C34 H30 Co N10 010 CCS

L30 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

952062-01-0 CAPLUS
3H-Indol1um, 2-[[5-chloro-1,3-dihydro-1-methyl-3,3-bis(phenylmethyl)-2Hindol-2-y-lidene]methyl]-1,3,3-trimethyl-5-nitro-,
bis[1-butyl-1,2,5,6-tetrahydro-5-[2-[2-(hydroxy-M0)-5nitrophenyl]diazenyl-M1]-4-methyl-2-oxo-6-(0.ox-M0)-3pyridinecarbonitrilato(2-)]cobaltate(1-) (1:1) (CA INDEX NAME)

CRN 952062-00-9 CMF C35 H33 C1 N3 02

CM 2

330442-50-7 C34 H30 Co N10 010 CCS

THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT RE. CNT 17

L30 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

CM 2

CRN 61575-70-0 CMF C23 H27 N2

L30 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:1226942 CAPLUS
DN 145:507110
T1 Cyanine colorants with good lightfastness, solubility, and heat
characteristics for optical recording media
n Aizawa, Yasushi! Ito, Michiei Dan-Oh, Yasuffumi; Yano, Kentaro; Shoda,
Hisashi: Satake, Kenichi; Uchida, Naoyuki
PA Kabushiki Kaisha Hayashibara Seibutsu Kagaku Kenkyujo, Japan
SO PCT Int. Appl., 50pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAM. CNI 1
PATENT NO. KIND DATE APPLICATION NO. DATE PATENT NO. KIND DATE APPLICATION NO. PATENT NO.

PI W: AE, AG, AL

W: AE, AG, AL

CA, CO, CR

GE, GH, GM

KZ, LC, LK

SG, SK, SL

VM, YU, ZA

RW: AT, BE, BG

LG, KG, KG, KG, KG

RW: AT, BE, BG

LG, KG, LG, KG

KG, KZ, MD

RP 1897915

EP 1897915

EP 1897915

PRAI JP 2005-147544

WO 2006-JP510061

OS

MARPAT 145:507110 

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

20080125 20080604

20050520 20060519

IN 2007-CN5270 CN 2006-80020087

20071120 20071206

TITLE CYANIME COMPUS. I Which absorb short-wavelength visible light can be used as a light absorbing material in a wide variety of applications including information recording, solar power generation, elec. machineries and apparatus, elec. communication equipment, outside equipment, clothing materials, building and bedding products, healthy and bygienic goods, and agricultural materials, particularly optical recording media, wherein RI, R2, R3, R4, R5, R6 = (un) substituted hydrocarbon; R7, R8 = H or substituent; and X = transition metal (Group 5-Group 12) complex. Thus, 1.8 g a compound II and 2.6 g a compound III were refluxed in acetic anhydride, 0.7 g of the resulting compound was reacted with 0.9 g a metal azo complex to give a cyanine colorant IV, showing m.p. 190° (eccomposition temperature 250°, Amax 469 nm (extinction coefficient 8.62 + 104), and good solubility in organic solvents and light resistance. 915131-83-83-639 trial manufacture): TEM (Technical or engineered material use): PREP (Preparation): USES (Uses)

915131-83-8P Substitute in organic solvents and light resistance.

RL: IMF (Industrial manufacture): TBM (Technical or engineered material use); FREP (Preparation); USES (Uses) (colorant; preparation of cyanine colorants with good lightfastness, solubility, and heat characteristics for optical recording media)

RN 915131-83-8 CAPLUS

L30 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

CM 1

CRN 915131-74-7 CMF C37 H39 N2

CM2

330442-50-7 C34 H30 Co N10 010 CCS

RE. CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT ANSWER 6 0F 8 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
3H-Indolium, 2=[[1,3-dihydro-1,3-dimethyl-3-(phenylmethyl)-2H-indol-2ylidene]methyl]-1,3,8-trimethyl- bis[1-butyl-1,2,8,6-tetrahydro-5-[[2(hydroxy-NO)-5-nitrophenyl]azo-NNl]-4-methyl-2-oxo-6-(oxoNO)-3-yyridinecarbonitrilato(2-)]cobaltate(1-) (9CI) (CA INDEX
NAME)

CM

915131-81-6 C29 H31 N2

CM 2

330442-50-7 C34 H30 Co N10 010 CCS

IT 915131-76-9P

9J5131-76-9P
RL: JMF (Industrial manufacture): TEM (Technical or engineered material use): PREP (Preparation): ISES (Uses)
(intermediate: preparation of cyanine colorants with good lightfastness, solubility, and heat characteristics for optical recording media)
9J5131-76-9 (APLUS
3H-Indolium, 1-ethvl-2-[[1-ethvl-1, 3-dihvdro-3-methyl-3-(phenylmethyl)-2H-indol-2-y-lidenelmethyl]-5-methyl-3-(phenylmethyl)bis[1-butyl-1, 2, 5, 6-tetrahydro-5-[[2-(bydroxy=0)-5-mitrophenyl]azoNNI)-4-methyl-2-oxo-6-(oxo-NO)-3-pyridinecarbonitrilato(2)]cobaltate(1-) (9CI) (CA INDEX NAME)

ANSWER 7 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN 2005:1125631 CAPLUS 113:396410 Write-once information recording medium and dyes therefor Morita, Seiji; Takazawa, Koji; Morishita, Naoki; Nakamura, Naomasa; Atizawa, Yasushi; Koyama, Yoshinori Kabushiki Kaisha Toshiba, Japan; Hayashibara Biochemical Laboratories, Toc

Inc.
SO Bur. Pat. Appl., 32 pp.
CODEN: EFXXDW
DT Patent
LA English
FAN. CNT 1
PATENT NO. KIN

KIND DATE APPLICATION NO. DATE 

CM 1

CRN 330442-50-7 CMF C34 H30 Co N10 010 CCI CCS

L30 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN (Continued

CM 2

CRN 61575-70-0 CMF C23 H27 N2

| RN | 866757-28-0 | CAPLUS | Sh-Indolium, 2-[(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)methyl]-1-ethyl-3,3-dimethyl-1, bis[1-butyl-1,2,5,6-tetrahydro-5-[[2-(hydroxy-KO)-5-nitrophenyl]azo-KN]-4-methyl-2-oxo-6-(oxo-KO)-3-pyridinearbonitrilato(2-]]cobaltate(1-) | 90CI (CA INDEX NAME)

CM 1

CRN 866757-27-9 CMF C24 H29 N2

CM 2

L30 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

CM 1

CRN 866757-30-4 CMF C27 H23 F12 N2

CM 2

CRN 330442-50-7 CMF C34 H30 Co N10 010 CCI CCS L30 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

CRN 330442-50-7 CMF C34 H30 Co N10 010 CCI CCS

RN 866757-29-1 CAPLUS
CN 3H-Indolium, 1-ethyl-2-[(1-ethyl-3,3-dimethyl-2H-indol-2-ylidene)methyl-3,3-dimethyl-, bis[[-butyl-1,2,5,6-tettahydro-5-[[2-(hydroxy-κ0)-5-nitrophenyl]azo-κN]]-4-methyl-2-οχο-6-(οχο-κΟ)-3-pyridimearbonitrilato(2-)]cobaltate(1-) GCI) (CA INDEX NAME)

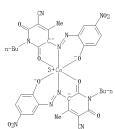
CM 1

CRN 802280-18-8

CM 2

CRN 330442-50-7 CMF C34 H30 Co N10 010 CCI CCS

L30 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



CM 1

CRN 866757-32-6 CMF C27 H29 N2

CM 2

CRN 330442-50-7 CMF C34 H30 Co N10 010 CCI CCS L30 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN

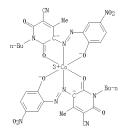
CM 1

CRN 866757-34-8 CMF C27 H29 N2

CM 2

CRN 330442-50-7 CMF C34 H30 Co N10 010 CCI CCS

L30 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



CM 1

CRN 866757-38-2 CMF C28 H30 C1 N2

CM 2

CRN 330442-50-7 CMF C34 H30 Co N10 010 CCI CCS

L30 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN

 $\begin{array}{lll} 866757-37-1 & CAPLUS\\ 1H-Benz[e]indolium, 2-[(1,3-dihydro-1,3,3-trimethy1-2H-indol-2-ylidene)methyl]-3-ethyl-1,1-dimethyl-,\\ bis[[-butyl-1,2,5,6-tetrahydro-5-[[2-(hydroxy-<math>\times$ 0)-5-nitrophenyl]azo- $\times$ 0,1]-4-methyl-2-oxo-6-(oxo- $\times$ 0)-5-pytidinecarbonitrilato(2-)]cobaltate(1-) (9C1) (CA INDEX NAME)

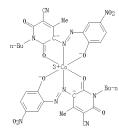
CM 1

CRN 866757-36-0 CMF C28 H31 N2

CM 2

CRN 330442-50-7 CMF C34 H30 Co N10 010 CCI CCS

L30 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



Page 60 10/590, 895

ANSWER 8 0F 8 CAPLUS COPYRIGHT 2008 ACS on STN 2005:1106715 CAPLUS 143:396409 145:396409 145:396409 145:396409 145:396409 145:396409 145:396409 145:300 145:30 L30 AN DN TI IN PA Inc.
SO U.S. Pat. Appl. Publ., 26 pp.
CODEN: USXXCO
DT Patent
LA English
FAN.ONT 1 PAN. CNT 1
PATENT NO. KIND DATE APPLICATION NO. DATE

PI US 20060227178 A1 20051013 US 2005-103646 20050412
JP 20062297406 A 20061027 JP 2004-118344 20040413
EP 1587093 A2 20051019 EP 2005-102631 20050404
EP 1587093 A3 20060419
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, JT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BB, CZ, EB, HU, PL, SK,
BA, HR, IS, YU
IN 2005DE00872 A 20061110 IN 2005-DE872 20050405
CN 1684171 A 20061019 CN 2005-10066178 20050413
KR 2006045667 A 2006617 KR 2005-30690 20050413
CM ARPAT 143:39640
AB The present invention relates to a recording material for a medium used for the recording film of a write-once type information recording disk equipped with a transparent resin substrate on which concentric or spiral grooves were formed and a recording film which was formed on the grooves, characterized in that it is formed by one organic coloring matter having an anion portion and a coloring matter portion in which the maximum absorption wavelength sone exists at a longer wavelength side than the wavelength laser beam, and the record mark has a higher orbical reflection coefficient ban the obtical reflection coefficient of the recording film by irradiation of the short wavelength laser beam, and the record mark has a higher orbical reflection coefficient than the obtical reflection coefficient of the recording film before irradiation of the short wavelength laser beam. This material realizes so-called Low to High property.

18 866757-28-18 686757-28-3
866757-31-8 686757-38-7
866757-31-8 686757-38-7
866757-31-8 686757-38-7
866757-31-8 686757-38-7
866757-31-8 686757-38-7
866757-31-8 686757-38-7
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866757-31-8 686757-38-7
866757-31-8 686757-38-7
866757-31-8 686757-38-7
866757-31-8

CM 1

CRN 330442-50-7 CMF C34 H30 Co N10 010 CCI CCS

L30 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

C34 H30 Co N10 010

 $\begin{array}{lll} 866757-29-1 & CAPLUS \\ 3H-Indollum, & 1-ethyl-2-[(1-ethyl-3, 3-dimethyl-2H-indol-2-ylidene)methyl]-3, 3-dimethyl-, & is[]-butyl-1, 2, 5, 6-tettahydro-5-[[2-(hydroxy-KO)-5-nitrophenyl]azo-KV]-4-methyl-2-oxo-6-(oxo-KV)-3-pyridinearonitrilato(2-)]coaltate(1-) (GCI & INDEX NAME) \\ \end{array}$ 

CM 1

CRN 802280-18-8 CMF C25 H31 N2

2 CM

CRN 330442-50-7 CMF C34 H30 Co N10 010 CCI CCS

L30 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN

CM 2

CRN 61575-70-0 CMF C23 H27 N2

866757-28-0 CAPLUS 3H-Indolium, 2-[(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)methyl]-1-ethyl-3,3-dimethyl-, bis[1-butyl-1,2,5,6-tetrahydro-5-[(2-(hydroxy-KO)-5-nitrophenyl]azo-KN])-4-methyl-2-oxo-6-(oxo-KO)-5-pyridinezarbohitrilato-(2-)[cobaltatel-1)-(9c1) (CA INDEX MAME)

CM 1

CRN 866757-27-9 CMF C24 H29 N2

CM

L30 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

866757-31-5 CAPLUS
3H-Indolium, 2-[[1, 3-dihydro-3, 3-dimethyl-1-[2, 2, 2-trifluoro-1(trifluoromethyl) ethyl]-2H-indol-2-ylidene] methyl]-3, 3-dimethyl-1-[2, 2, 2trifluoro-1-(trifluoromethyl) ethyl]-,
bis[1-butyl-1, 2, 5, 6-tetrahydro-5-[[2-(hydroxy-⋈0)-5-nitrophenyl]azo≼N[]-4-methyl-2-xox-6-(xox-⋈0)-3-yndidnecarbonitrilato(2)]cobaltate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 866757-30-4 CMF C27 H23 F12 N2

CM 2

CRN 330442-50-7 CMF C34 H30 Co N10 010 CCI CCS

L30 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN

866757-33-7 CAPLUS
1H-Benz[e]indolium, 2-[(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)methyl]-1,13-trimethyl-, bis[1-butyl-1,2,5,6-tetrahydro-5-[[2-(hydroxy-NO)-5-nitrophenyl]azo-NN]-4-methyl-2-oxo-6-(oxo-NO)-5-pyridinecarbonitrilato(2-)]cobaltate(1-) (OCI) (CA INDEX NAME)

CM 1

CRN 866757-32-6 CMF C27 H29 N2

CM

CRN 330442-50-7 CMF C34 H30 Co N10 010 CCI CCS

L30 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN

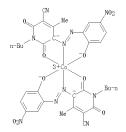
CM 1

CRN 866757-34-8 CMF C27 H29 N2

CM 2

CRN 330442-50-7 CMF C34 H30 Co N10 010 CCI CCS

L30 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



 $866757-37-1 \quad CAPLUS\\ 1H-Benz[e]indolium_{2}=[(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)methyl]-3-ethyl-1,1-dimethyl-,\\ bis[1-butyl-1,2,5,6-tetrahydro-5-[[2-(hydroxy-<math>\%$ 0)-5-nitrophenyl]azo-%1]-4-methyl-2-oxo-6-(oxo-%0)-3-pyidinecarbonitrilato(2-))cobaltate(1-) (9C1) (CA INDEX NAME)

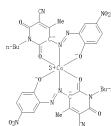
CM 1

CRN 866757-36-0 CMF C28 H31 N2

CM 2

CRN 330442-50-7 CMF C34 H30 Co N10 010 CCI CCS

L30 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



 $866757-39-3 \quad CAPLUS\\ 3H-Benz[g]indolium, 2-[(6-chloro-1,3-dibydro-1,3,3-trimethyl-2H-indol-2-ylidene)methyl]-1-ethyl-3,3-dimethyl-,\\ bis[1-butyl-1,2,5,6-tetrabydro-5-[[2-(hydroxy-<math>\Re 0)$ -5-nitrophenyl]azo-, 8hl]-4-methyl-2-oxo-6-(oxo- $\Re 0$ -3-pyridineoxponitrilato(2-))cobaltate(1-) (9CI) (CA INDEX RAME)

CM 1

CRN 866757-38-2 CMF C28 H30 C1 N2

CM 2

CRN 330442-50-7 CMF C34 H30 Co N10 010 CCI CCS

L30 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

 $\Rightarrow$  d his (FILE 'HOME' ENTERED AT 14:34:37 ON 16 DEC 2008) FILE 'REGISTRY' ENTERED AT 14:34:59 ON 16 DEC 2008 STRUCTURE UPLOADED L1 STRUCTURE UPLOADED L2L3 0 S L1 AND L2 0 S L1 AND L2 FULL L4 7 S L1 L5 214 S L1 FULL L6 2 S L2 L781 S L2 FULL L8 L9 0 S L6 AND L8 FILE 'CAPLUS' ENTERED AT 14:42:19 ON 16 DEC 2008 112 S L6 L10 5 S L8 L11 0 S L10 AND L11 L12 FILE 'REGISTRY' ENTERED AT 14:46:10 ON 16 DEC 2008 FILE 'CAPLUS' ENTERED AT 14:47:08 ON 16 DEC 2008 FILE 'HOME' ENTERED AT 14:47:54 ON 16 DEC 2008 FILE 'REGISTRY' ENTERED AT 14:49:30 ON 16 DEC 2008 STRUCTURE UPLOADED L13 1 S L13 L14 25 S L13 FULL L15 13 S L15 AND CAPLUS/LC L16 L17 12 S L15 NOT L16 FILE 'CAPLUS' ENTERED AT 14:52:32 ON 16 DEC 2008 3 S L15 L18 E AIZAWA YASUSHI/AU 30 S E3 L19 E KOYAMA YOSHINORI/AU L20 84 S E3 E NOGUCHI AYASHI/AU L21 16 S E3 122 S L19 OR L20 OR L21 L22 19 S L22 AND CYANINE L23 SEL L23 11 RN FILE 'REGISTRY' ENTERED AT 14:58:09 ON 16 DEC 2008 L24 4 S E1-E4 FILE 'HOME' ENTERED AT 14:59:36 ON 16 DEC 2008 FILE 'REGISTRY' ENTERED AT 15:01:56 ON 16 DEC 2008 L25 STRUCTURE UPLOADED L26 8 S L25 L27 142 S L25 FULL 14 S L6 AND L27 L28 L29 14 S L6 AND L27 FULL

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8 S L28

L30

=> s 16 and 127

112 L6 34 L27 9 L6 AND L27 L31

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ANSWER 1 OF 1 CAPLUS COPYRIGHT 2008 ACS on STN 2005:979709 CAPLUS 143:268290 Short visible light absorbing cyanine dyes with good light resistance and solubility Alzawa, Yasushi: Koyama, Yoshinori; Noguchi, Ayashi Kabushiki Kaisha Hayashibara Seibutsu Kagaku Kenkyujo, Japan PCT Int 48-01 26 Face IN PA SO ra habushiki Kaisha Hayasi SO PCT Int. Appl., 25 pp. CODEN: PIXXD2 DT Patent LA Japanese FAN. CNT 1 PATENT NO. KIN KIND DATE APPLICATION NO. DATE IN 2006CN03552 A 20070622 IN 2006-CN3552 20060926
US 20080000004 Ai 20080103 US 2007-590895 20070613
IJP 2004-53528 A 2004027
IJP 2004-53528 A 2004027
IJP 2004-173653 A 20040611
WO 2005-IJP2978 W 20050224
MARPAT 143:268290
ITtle cyanine dyes have a specific structure and exhibit the primary local maximum of absorption in the region of a wavelength ≥400 rm in the state of a solution Thus, 2 g 2-[1, 3-dihydro-1, 3, 4-trimethyl-2H-2-ylidene)methyl]-1, 3, 4-trimethyl-3H-indolium perchlorate and 3.5 g triethylamnonium bis[I-butyl-1], 2-dihydro-6-(hydroxy-w0)-5-[[2-(hydroxy-w0)-5-ntrophenyl]azo-wN1]-4-methyl-2-oxo-3pyridinecarbonitrilato(2-)]-cobaltate were refluxed for 20 min in 20 mL acetonitrile, removed solvent, ethanol was added therein and refluxed for 30 min to give a cyanine dye with absorption maximum 447 mm, good solubility in various solvents, decomposition temperature 245°, and good light resistance. 350442-50-T
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(short visible light absorbing cyanine dyes with good light resistance and solubility)
350442-50-7 CAPLUS
Cobaltate(1), bis[]-butyl-1, 2, 5, 6-tetrahydro-5-[[2-(hydroxy-w0)-5-nitrophenyl]azo-wN1]-4-methyl-2-oxo-6-(oxo-w0)-3-pyridinecarbonitrilato(2-)]- (9CI) (CA INDEX NAME)

LS2 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2008 ACS on STN (Continued) nitrophenyl]diazenyl-wNl]-4-methyl-2-oxo-6-(oxo-wO)-3- pyridinecarbonitrilato(2-)]-, hydrogen, compd. with N,N-diethylethanamine (1:1:1) (CA INDEX NAME)

CM 1

419581-79-6 C34 H30 Co N10 010 . H

CM 2

Вt Et-N-Et

863962-11-2 CAPLUS 1H-Benz[e]indo]ium, 2-[(1,3-dihydro-1,1,3-trimethyl-2H-benz[e]indol-2-ylidene)methyl]-1,1,3-trimethyl-, perchlorate (1:1) (CA INDEX NAME)

CM 1

CM 2

L32 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2008 ACS on STN

103998-41-0 419581-80-9 863962-11-2 RL: RCT (Reactant): RACT (Reactant or reagent) (short visible light absorbing cyanine dyes with good light resistance and solubility) 103998-41-0 CAPLUS 3H-Indolium, 2-[(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)methyl]-1,3,3-trimethyl-, perchlorate (1:1) (CA INDEX NAME) IT

CM 1

CRN 61575-70-0 CMF C23 H27 N2

CM 2

CRN 14797-73-0 CMF Cl 04

419581-80-9 CAPLUS Cobaltate (1-), bis[1-butyl-1, 2, 5, 6-tetrahydro-5-[2-[2-(hydroxy- $\kappa 0)$ -5-

L32 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2008 ACS on STN (Continued) CRN 14797-73-0 CMF C1 O4

RE. CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L1
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L2
                STRUCTURE UPLOADED
              O SEA SSS SAM L1 AND L2
L4
              O SEA SSS FUL L1 AND L2
              7 SEA SSS SAM L1
L5
            214 SEA SSS FUL L1
L6
L7
              2 SEA SSS SAM L2
                D SCAN
L8
             81~{\rm SEA}~{\rm SSS}~{\rm FUL}~{\rm L2}
L*** DEL
              0 S L6 AND L7
              O SEA ABB=ON PLU=ON L6 AND L8
L9
     FILE 'CAPLUS' ENTERED AT 14:42:19 ON 16 DEC 2008
L10
            112 SEA ABB=ON PLU=ON L6
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L11
L12
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FILE 'REGISTRY' ENTERED AT 14:46:10 ON 16 DEC 2008 D L1

D L2

FILE 'CAPILIS' ENTERED AT 14:47:08 ON 16 DEC 2008

SEL L23 11 RN

GEL E25 II MV
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FILE 'HOME' ENTERED AT 14:59:36 ON 16 DEC 2008
FILE 'REGISTRY' ENTERED AT 15:01:56 ON 16 DEC 2008
STRUCTURE UPLOADED
D
8 SEA SSS SAM L25
142 SEA SSS FUL L25
14 SEA ABB=ON PLU=ON L6 AND L27
D QUE L28 STAT
D 1-14 IDE CAN
14 SEA ABB=ON PLU=ON L6 AND L27
FILE 'CAPLUS' ENTERED AT 15:06:09 ON 16 DEC 2008
8 SEA ABB=ON PLU=ON L28
D 1-8 BIB ABS HITSTR
9 SEA ABB=ON PLU=ON L6 AND L27
1 SEA ABB=ON PLU=ON L31 NOT L30
D BIB ABS HITSTR

FILE HOME

FILE REGISTRY

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FILE COVERS 1907 - 16 Dec 2008 VOL 149 ISS 25 FILE LAST UPDATED: 15 Dec 2008 (20081215/ED)

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